

Multi-Media Compliance Evaluation Inspection
USEPA Region III
Office of Enforcement, Compliance and Environmental Justice

Joint Base Anacostia-Bolling
Washington, DC

Inspection Dates: September 1-3, 2015

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Background.....	3
Facility Description	3
Opening Conference	4
Technical Reports	5
Clean Air Act.....	5
Resource Conservation and Recovery Act – Underground Storage Tanks	16
Resource Conservation and Recovery Act – Hazardous Waste	25
Clean Water Act - Stormwater.....	34
Spill Prevention Countermeasure and Control	49
Closeout Conference	50

Background

A multi-media inspection of Joint Base Anacostia-Bolling (the Facility or JBAB) was conducted on September 1st – 3rd, 2015, by the Environmental Protection Agency (EPA) Region III's Federal Facility Program housed in the Office of Enforcement, Compliance and Environmental Justice (OECEJ). This office conducts a number of multi-media compliance inspections each year at Federal Facilities located in Region III.

This multi-media inspection was based on national and regional initiatives with a focus on federal facilities having an impact on the Chesapeake Bay watershed. The aforementioned focus areas along with issues or concerns dealing with past compliance history and environmental risk factors provide the makeup of the targeting process.

The objectives of this multi-media inspection was to get a snapshot of the Facility's overall compliance with regard to current environmental regulations. The scope of the inspection included compliance with:

- Clean Air Act (CAA). This aspect of the inspection focused on the Facility's Title V permit(s), stationary air emissions sources, and ozone depleting substances (ODSs).
- Resource Conservation and Recovery Act (RCRA). This aspect of the inspection focused on the hazardous waste (RCRA-C) and on underground storage tanks (RCRA-I).
- Clean Water Act (CWA). This aspect of the inspection focused on industrial stormwater, municipal separate storm sewer system (MS4), and construction sites.
- Spill Prevention, Control and Countermeasure (SPCC) regulations. This part of the inspection looked at the Facility's SPCC plan with regards to above and below ground containers and equipment containing oil.

As part of the multi-media inspection, the inspectors also reviewed the records associated with each program.

Facility Description

The Facility is a 966-acre military installation located in Southwest Washington, DC. It was established October 1, 2010, under the 2005 Base Realignment and Closure Act (BRAC). This resulted in the consolidation of Naval Support Facility Anacostia and Bolling Air Force Base (Bolling AFB) into one joint base. The Navy housing area south of Bolling AFB was also merged as part of JBAB. JBAB reports to Naval District Washington (NDW). JBAB is home to many

Department of Defense commands and units, which support presidential, ceremonial, homeland security, defense support to civil authorities and national security missions conducted by all five branches of the armed forces and other federal agencies. Below is a list of the tenants:

- Air Force 11th Operations Group
- Defense Intelligence Agency (DIA)
- Marine Helicopter Squadron One
- White House Communications Agency (WHCA)
- U.S. Secret Service
- U.S. Coast Guard
- Naval Systems Management Agency (NSMA)
- Joint Air Defense Operation Center (JADOC)

The Facility provided the lead EPA inspector with a copy of the management structure which included the public works environmental organization chart (see **General attachment #1**).

Opening Conference

The EPA multi-media inspection team arrived at the Facility on September 1st, 2015, and met with Facility representatives. The EPA inspectors conducted an opening conference with the Facility management along with representatives from programs throughout the Facility. At this time the EPA inspectors presented their credentials to the Facility representatives as authorized EPA representatives. The EPA lead inspector provided an overview for the scope of the inspection to the Facility personnel, including aspects of why the Facility was selected for inspection. The EPA lead inspector also let the Facility know that a close out conference would be conducted at the end of the inspection, to discuss any findings and or concerns found during the inspection.

Technical Reports

Clean Air Act

This section addresses compliance with the CAA related to stationary air emissions sources and ozone depleting substances (ODSs). The JBAB is subject to the CAA due to its emissions of air pollutants from three large boilers (greater than 10 million British Thermal Units per hour (MMBTU/hr)), numerous smaller boilers, numerous emergency generators (EGs), several paint spray booths, two printing presses, and other sources. According to Facility representatives, there are no industrial operations or aircraft maintenance at the Facility, but vehicle maintenance is conducted at a few locations on the Facility.

JBAB was formed by combining the Anacostia Annex (AA) of the Washington Navy Yard and Bolling Air Force Base (BAFB) in October 2010. Prior to this date the facilities operated separately and each had been issued a Title V Permit by the District Department of the Environment (DDOE). Both Title V Permits had an effective date of 9/27/04 and the BAFB permit expired on 9/26/09 and the AA permit expired on 9/27/09. AA and BAFB submitted renewal permit applications in a timely manner in March 2009 and the expired permits have been administratively extended. JBAB later submitted a permit application for one Title V Permit for the combined facility on 3/1/12. At the time of the inspection, the Facility was still operating under the old permits until the new permit is issued.

AA and BAFB were also issued numerous Permits to Construct and Operate (PTCOs) by DDOE since the Title V Permits were issued in September 2004. These permits included four permits for 11 boilers, one permit for a paint spray booth (at the White House Communications Agency), and at least 10 permits for numerous EGs. At the time of the inspection, Facility representatives reported there were no new air emission sources that had begun operation that are not permitted or for which permit applications have not been submitted to DDOE. However, there have been changes to the emission sources in the current permits that included removal or replacement of some of the boilers, closure and/or removal of some of the paint booths, and removal of solvent parts cleaners or replacement with aqueous parts cleaning units. Until the new Title V Permit is issued and replaces the numerous current permits, managing and evaluating compliance with all of the permits with their varying requirements will continue to be a challenge for JBAB personnel and EPA and DDOE CAA inspectors.

Some of the air emission sources regulated under DDOE permits and/or listed in permit applications also appear to be subject to Federal CAA New Source Performance Standards (NSPS) and National Emissions Standards for Hazardous Air Pollutants (NESHAPs) including 40 Code of Federal Regulations (CFR) Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units and Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, and 40 CFR Part 63, Subpart CCCCCC, National Emission Standards for Gasoline Dispensing Facilities (GDFs), and Subpart ZZZZ, National Emission Standards for Reciprocating Internal Combustion Engines (RICE).

According to Kristin Riggs, Air Program Manager, and the individual boiler operators that were

interviewed, all the stationary boilers that could be used at JBAB primarily burn natural gas and only burn fuel oil during periods of gas curtailment and for testing. After the inspection in response to information requests from EPA, JBAB provided information related to this issue and certified that "no boilers located at JBAB are considered applicable sources subject to 40 CFR 63, Subpart JJJJJ" (see **CAA attachment #1A through 1E for copies of the responses from JBAB dated 12/7/15, 12/24/15, and 1/6/16**).

In addition, the Facility has numerous air conditioning and refrigeration (ACR) units with ODSs that are regulated under Title VI of the CAA and Section X of the Title V Operating Permits. These ACR units are located throughout JBAB and are maintained by both government employees and contractors, as managed by JBAB and some of the 52 tenants.

According to the EPA website Enforcement & Compliance History Online (ECHO), Anacostia Annex (AA) of the Washington Navy Yard and Bolling Air Force Base (Bolling AFB) have been inspected by DDOE about every two years and the most recent CAA full compliance evaluations (FCEs) at AA and BAFB were conducted on 8/7/13 and 9/4/13, respectively. According to ECHO, no concerns were identified during the last FCEs. A CAA FCE was conducted at BAFB by EPA on 5/22/12, but no violations were noted in the inspection report and no known enforcement actions by EPA have been taken.

There was one CAA enforcement action shown in ECHO taken by DDOE for CAA violations in the last five years: an Administrative Order (AO) with a \$16,000 penalty dated 3/25/14. The AO was issued to Bolling AFB for failing to obtain CAA permits for three boilers prior to installation and operation in Bldg. 18. According to the 12/7/15 response from JBAB (see **CAA attachment #1A and 1B**) to EPA's Information Request Letter, the installation of these boilers first began on 9/4/13, the operation of the boilers began on 11/24/13, JBAB first applied for permits on 4/9/13, and was issued the permits on 10/22/14.

Inspection Observations/Issues of Concern

Several buildings and outdoor areas containing one or more air emissions sources were inspected for compliance with applicable regulations and permit conditions during the inspection. These buildings and areas and related observations are presented below according to the chronological order they were visited (the date each building or area was inspected is noted after the title). These observations are based on interviews with Facility personnel and physical observations made by the inspector.

The EPA contractor inspector, Michael Prescott, was accompanied by Ms. Riggs during the inspection of the Facility. Two tenants at JBAB did not allow access to Mr. Prescott and the other inspectors without providing personal information and consequently were not inspected. These tenants included the Secret Service compound, which conducted vehicle maintenance and had two paint spray booths and three parts washers, and the White House Communications Agency (WHCA), which had a paint spray booth and two parts washers, per the permits and 2014 emissions inventory.

Bldg. 18 BAFB Central Utility Plant - 9/2/15

Three large boilers are located in this building that are rated at 30.25 MMBTU/hr for natural gas and 28.8 MMBTU/hr for No. 2 fuel oil (per the permits for these boilers). These boilers were first installed in September 2013 and permits were issued on 10/22/14 to construct and operate these boilers (enforcement was taken and a penalty of \$16,000 was assessed by DDOE for installing and operating these boilers without a permit, as discussed above). Ms. Riggs and Allen Wrenn, Utility Plant Supervisor reported these boilers primarily burn natural gas and only burn oil when there are gas utility curtailments or when testing the boilers. At the time of the inspection, none of these boilers were operating because they are only used for heat and they were undergoing repairs (**a view of this building and one of the boiler exhaust stacks is shown in CAA Photo #1**).

The permits for these new boilers required that performance tests be conducted within 180 day of issuance of these permits. According to Ms. Riggs and the performance tests report, performance tests were conducted by a contractor on April 21 - 22, 2015 on Boilers 1 and 2 and Boiler 1 failed to meet the emission limits for carbon monoxide and nitrogen oxides (Boiler 3 was out of service). Mr. Wrenn believed the reason for the failure was the boilers were tested with very little load. Since the tests were run, the boilers have been off-line and under repair. Ms. Riggs and Mr. Wrenn hope to conduct follow-up performance tests after Boilers 1 and 2 begin operation for the winter season in November or December (Boiler 3 will require further time and funds to repair and may not be used this next winter season). Mr. Prescott reviewed a sampling of operating logs for these three boilers for the last three years. The logs contained data on operating hours, quantity and type of fuel used, and maintenance records. These logs also included visible emissions observations conducted every shift, although they were not Method 9 observations which are done annually by a contractor.

Additionally, JBAB has two portable boilers in trailers that burn fuel oil, one of which was located at the Utility Plant (**see CAA Photo #1 for a view of the trailer**) and one is located at the Transportation area parking lot adjacent to Bldg. 362 (note this second portable boiler was relocated to Bldg. 18 after the inspection). JBAB sent a letter to DDOE on 3/1/12 stating that they had no intention of using these portable boilers in the future and wanted them removed from the renewal permit. However, Ms. Riggs and Mr. Wrenn reported there were plans to try to fund repairs for at least one unit to have it available for contingency use during cold weather for the winter of 2015-2016.

Bldgs. 362, 363, and 364 Transportation - 9/2/15

Mr. Prescott visited the Transportation area consisting of a few buildings for vehicle maintenance, administration, and washing vehicles. Donnie Adkins, Assistant Director, escorted Mr. Prescott to these buildings, in particular Bldg. 362 where the vehicles were serviced and where there was a paint spray booth for painting parts (**see CAA Photo #2 for a view of this paint booth**). However, Mr. Adkins reported the paint spray booth had not been used in about three years and the painter who had been using it had passed away about two years ago. There also was a paint gun cleaner with a little solvent in it that also had not been used during the same time the

booth was not used.

Bldg. 365 Military Gas Station - 9/2/15

Mr. Prescott visited the Military Gas Station and observed the Stage I vapor recovery port for the gasoline underground storage tank (UST), the Stage II vapor recovery system for the gasoline dispenser, and the instructional signage on the gasoline dispenser (**see CAA Photo #3**).

Bldgs. 353, 354, 355, and 356 DC Army National Guard - 9/2/15

Mr. Prescott inspected the DC Army National Guard area consisting of a few buildings for vehicle maintenance, administration, and other activities. CW2 Britton, Supervisor Maintenance Specialist, and Sgt. Major Daniel, CSMS Superintendent, provided information to Mr. Prescott and escorted him to these buildings. In particular, Mr. Prescott visited Bldg. 356 where there had been a paint spray booth listed in the BAFB permit for painting parts. However, the paint spray booth had been removed about a year ago, per CW2 Britton (**see CAA Photo #4 for a view of where the paint spray booth had been located and the old ceiling vent**). In addition, there were two empty parts cleaners in crates that were not used and probably will not be used at this location. Mr. Prescott did not observe any significant air emissions sources in the other three buildings.

Bldg. 4472 Arts and Crafts Center - 9/3/15

Mr. Prescott visited the Arts and Crafts Center and met with Anje Flores, Illustrator, who showed him the spray booth in the Wood Shop. Mr. Flores reported the spray booth had not been used in about two years. Mr. Prescott inspected the spray booth and observed there was a sign on the door that said "Closed Until Further Notice" (**see CAA Photo #5**) and the booth looked like it had not been used in a while (there were no paints or other hazardous materials in the flammable locker next to the booth). Ms. Riggs indicated she was trying to convince the shop representatives to allow for removal of the booth.

Bldg. 1311 Army and Air Force Exchange Service (AAFES) Gas Station - 9/3/15

Mr. Prescott visited the AAFES Gas Station and observed the Stage I vapor recovery ports for the gasoline USTs, the Stage II vapor recovery system for the gasoline dispensers, and the instructional signs on the gasoline dispensers.

Bldg. 1304 Emergency Generators - 9/3/15

Outside this building were two EGs used for backup power for the building (**see CAA Photo #6**). The larger EG was installed in 2000 per the inventory provided by JBAB and the new EG was recently installed this year. The older EG's meter showed 408.6 hours on it. The generators were operational, but not running at the time of the inspection. There was a log of operating data in the older EG and the date and hour figures from the meter for the older EG were listed in the log for when it was run on a sporadic basis for testing and maintenance. However, there were no entries for the hours used for either EG when they were last tested on 7/30/15.

There were several other EGs installed at JBAB since the Title V Permit was issued and these EGs, along with the new one at Bldg. 1304, were issued PTCOs. Evaluation of the records required to be kept for these EGs is provided in the Documents Reviewed and Related Observations section below.

Bldg. 352 Marine Corps Reserve - 9/3/15

This is a small building for vehicle maintenance and a solvent parts cleaner was included in the AA permit for this building. Sgt. Hayes, Maintenance Chief, showed Mr. Prescott the new solvent parts cleaner (**see CAA Photo #7**) that replaced the old Safety-Kleen parts cleaning unit about one and a half months ago and the cover was closed. The Material Safety Data Sheet (MSDS) for the solvent in the new parts cleaner showed it contained mineral spirits and had a Flash Point of 142 degrees Fahrenheit. Sgt. Hayes reported they had not used the new parts cleaner and did not have much need for it.

Bldg. 169 AA Heat Plant - 9/3/15

Two boilers are located in this building that are rated at 4.2 MMBTU/hr and were manufactured in 1995, according to the manufacturer's boiler plates. According to Ms. Riggs and Robert Holmes, Utility Plant Operator, these boilers primarily burn natural gas and only burn oil when there are gas utility curtailments or when testing the boilers. At the time of the inspection, none of these boilers were operating because they are only used for heat and they were undergoing repairs. Mr. Holmes reported operating logs and records were kept when the boilers were operated, similar to the records kept for the Bldg. 18 boilers.

Bldg. 8 Auto Hobby/Skill Shop - 9/3/15

Mr. Prescott visited this building which is used for vehicle maintenance. Mr. Prescott observed the room where there had been a paint spray booth listed in the BAFB permit for painting parts. The paint spray booth had been removed since the Title V Permit was issued and painting was no longer conducted in this building (**see CAA Photo #8 for a view of where the paint spray booth had been located and the old ceiling vent**).

Bldgs. 6000 and 6000A Defense Intelligence Agency - 9/3/15

Mr. Prescott was escorted in the Defense Intelligence Agency (DIA) buildings and area by Renee Robinson, Environmental Compliance Program Manager (note taking photographs was prohibited in these buildings). The DIA buildings and area consist primarily of offices, but there is a Print Shop in Bldg. 6000. Mr. Prescott first met with representatives of EMCOR Government Services (EMCOR), the contractor that operates and maintains the DIA buildings and related facilities, including Rick DeGroat, Chief Engineer, Donnie Welborn, Lead Mechanic, Peggy Stack, Technician, and Tom Musgrove, Lead Electrical Supervisor. DDOE issued a PTCO for a solvent parts washer unit at DIA Bldg. 6000 on 10/27/11, but Ms. Robinson and the EMCOR personnel did not know of any such degreaser unit anywhere at DIA. This was further confirmed in the 12/7/15 response from JBAB (**see CAA attachment #1A**) to EPA's Information Request Letter.

Mr. Prescott discussed the operation of the boilers by EMCOR and reviewed related operating and maintenance records maintained by EMCOR using hard copy logs and computer programs. According to Mr. DeGroat, the boilers were only run on fuel oil during periods of mandatory gas curtailments and testing. Observations from interviews with these personnel and review of related documents with regard to evaluation of compliance with Title VI ODS requirements and EG permit requirements are presented in the Documents Reviewed and Related Observations section below.

Mr. Prescott then visited the Print Shop which housed two printing presses. Scott Sigwalt, Print Shop Supervisor, provided information on the presses and sample records that are kept to track the information required by the permit related to the inks and blanket wash used in the printing presses. These records are conveyed to Ms. Riggs who prepares the spreadsheets of information required for reports submitted to DDOE and EPA. Mr. Sigwalt reported the workload for the presses is variable, but overall has decreased about 90% from the busiest periods several years ago when there were four active printing presses.

The permit specifies limits of 15 lbs. /day and three lbs. /hour of allowable Volatile Organic Compounds (VOCs) emissions from solvents and inks used in the printing presses and daily and hourly calculations must be performed to demonstrate compliance with these limits. Instead, monthly chemical usage was averaged by Print Shop personnel over the number of days and hours that the Print Shop was in operation to demonstrate compliance with these limits. In the response letter from JBAB dated 12/7/15 (see **CAA attachment #1A**) to EPA's Information Request Letter, JBAB provided a copy of a letter sent to DDOE dated 8/22/03 requesting that a monthly chemical usage report averaged over the number of days and hours that the Print Shop was in operation be used to show compliance with these limits. However, JBAB acknowledged that no letter from DDOE approving this request could be located.

Documents Reviewed and related observations

Numerous documents were obtained in advance of the inspection as well as during the inspection. The listing of documents reviewed included the following:

1. DDOE Title V Operating Permit #003 for AFS Facility ID 1100100061 (BAFB) with an effective date of 9/27/04 and an expiration date of 9/26/09.
2. DDOE Title V Operating Permit #011 for AFS Facility ID 1100100049 (AA) with an effective date of 9/27/04 and an expiration date of 9/27/09.
3. DDOE PTCO for eight boilers (No. 6148) dated 10/24/08.
4. DDOE PTCOs for three boilers (Nos. 6745, 6746, and 6747) dated 10/22/14.
5. DDOE PTCOs for numerous EGs (Nos. 6160, 6403, 6525, 6526, 6538, 6541, 6547, 6632, 6637, and 6965) with multiple dates.
6. DDOE PTCO for a paint spray booth (No. 6543) dated 4/6/12.
7. Changes to the AA Air Emissions Inventory dated 7/13/11.
8. Permit Application for the JBAB Title V Permit dated 3/1/12.
9. 2014 Air Emissions Inventory (includes all ACR units, EGs, boilers, etc.).
10. Annual and Semi-Annual Reports for AA and for BAFB for 2012, 2013, 2014, and 2015.

11. Sample daily logs and monthly preventive maintenance records for EGs maintained by the Public Works Department (PWD) Electrical Shop.
12. Sample daily and monthly records for boilers and EGs operated and maintained by EMCOR in Bldgs. 6000 and 6000A.
13. Operating logs, daily visible emission observations, and other records for the boilers in Bldgs. 18 and 169.
14. Stationary Source Sampling Report Emissions Testing for Particulate Matter, Nitrogen Oxides, Carbon Monoxide and Visible Emissions April 21 and 22 for Boilers 1 and 2 in Bldg. 18 (undated).
15. Annual Method 9 Visible Emissions Reports for the boilers in Bldgs. 18, 169, and 6000 for 2013, 2014, and 2015.
16. Laboratory Analysis Report of the fuel oil in each of the nine tanks at Bldg. 18 dated 2/20/15.
17. MSDSs for the solvent parts cleaner in Bldg. 352 and for the inks and blanket wash used in the Print Shop in Bldg. 6000.
18. List of ACR units with greater than 50 pounds of refrigerant maintained by the PWD Heating Ventilation and Air Conditioning (HVAC) Shop and EMCOR.
19. Refrigerant training certifications for the PWD HVAC Shop and EMCOR ACR Technicians.
20. Records of service calls of ACR units on BAFB when refrigerant was recovered or added by the PWD HVAC Shop since July 2008.
21. Refrigerant Recovery or Recycling Device Acquisition Certification completed forms for PWD HVAC Shop dated 7/31/03 and 8/15/06 and for EMCOR dated 6/18/12.
22. Records of service calls of ACR units in Bldgs. 6000 and 6000A at DIA when refrigerant was recovered or added by EMCOR or subcontractors since December 2013.
23. EPA Region III Inspection Report of the Bolling Air Force Portion of the Joint Bolling Anacostia (Military) Base dated 5/22/12.
24. Joint Base Anacostia-Bolling Response (dated 9/26/12) to USEPA Letter 6 September 2012 (which included a list of BAFB generators).

Comparison of the known air emissions units at the facility with the list of air emissions units in the AA and BAFB Title V Permits, PTCOs, and in the permit applications and changes submitted to DDOE did not identify any units that were not included in submittals to DDOE. According to Ms. Riggs and the permit applications provided to Mr. Prescott by DDOE and JBAB, the new air emissions units installed since the Title V Permits were issued included 11 boilers, a paint spray booth, and numerous EGs, and DDOE issued PTCOs for these emissions units.

However, there were at least three occasions when air emissions sources were constructed, installed, and/or operated prior to obtaining PTCOs from DDOE including the following:

1. The three boilers at Bldg. 18 were installed and operated in September and November 2013, respectively, prior to obtaining PTCOs (as discussed above).
2. The paint spray booth in Bldg. 399 was installed and operated since 1991 (per the DDOE Technical Support Memo dated 2/16/12), but the permit application did not get submitted to DDOE until 10/4/11 and the PTCO was issued on 4/6/12.
3. The EG at Bldg. 350 was installed prior to obtaining a PTCO (per the 2015 Semi-Annual

Report), although this EG was not operating or connected to the building at the time of the inspection. Ms. Riggs reported a permit for this EG was applied for from DDOE.

Mr. Prescott reviewed the 2012 – 2015 Annual and Semi-Annual Reports for AA and BAFB and they contained documents and information required by the DDOE Title V Permits and PTCOs including the following:

- Annual Method 9 visible emissions observations
- Fuel usage and operating hours for boilers and EGs
- Fuel analyses and delivery receipts
- Paint spray booth and printing presses operating data and VOCs emissions and MSDSs for new solvents, coatings, and inks used
- Annual total emissions data
- Stage II vapor recovery tests for the Military and AAFES Gas Stations
- Deviations identified by JBAB.

These annual and semi-annual reports identified the following deviations and corrective actions that have not already been discussed:

- Visible emissions were observed coming from the exhausts of the two EGs at Bldg. 399 (WHCA) beginning in 2013 and continuing into 2014 when WHCA decided to refrain from exercising the EGs until a solution was in place. DDOE was notified of the potential exceedances. Then in April 2015, these EGs were utilized during a power disruption. JBAB reported there is a contract in place to build a load bank to reduce these emissions and this project is on schedule to begin in April 2016. Additional information on the deviations and corrective actions for these EGs provided by JBAB are provided in the response letter dated 12/7/15 (see **CAA attachment #1A**) to EPA's Information Request Letter.
- There were potential inadequacies in the ODS recordkeeping (including that of maintenance records for the equipment) identified in the 2014 and 2015 AA and BAFB reports. Ms. Riggs reported she was working with all the people responsible for maintaining the ACR units at JBAB to educate them on the compliance requirements and develop and implement appropriate recordkeeping systems.
- Boiler CU6000-1 had visible emissions observed during Method 9 observations in February 2014, but they only lasted a minute and were due to an unexpected shutdown of the boiler.
- Boiler CU6000-3 had visible emissions observed during Method 9 observations in December 2013 and JBAB reported this was due to the boiler being tuned for natural gas and not fuel oil. A retest in February 2014 did not identify visible emissions of concern from this boiler.
- The three lbs. /hour VOCs emissions threshold from one of the paint spray booths in Bldg. 411 was exceeded three times in the first half of 2012 and from the paint spray booth in Bldg. 362 twice in 2012. The 2012 AA and BAFB reports noted that personnel were retrained and instructed on how to stay below the emissions threshold.
- JBAB did not track VOCs emissions from the spray booth at Bldg. 399 until April 2012. The 2012 report indicated appropriate recordkeeping was implemented in April 2012.

The first half 2015 Semi-Annual Report reported that sampling of the fuel oil in the nine bulk storage tanks at Bldg. 18 used for the boilers in the Central Utility Plant showed one tank had fuel oil with a sulfur content of 0.1897 parts per million (ppm) that exceeded the permit limit for sulfur of .05% in the PTCOs for these boilers. The Semi-Annual Report reported this tank (Tank 6) was locked out of service during the week of 11/17/14 and remained locked out during the reporting period of the Semi-Annual Report. The sampling results for the fuel oil in the eight other tanks were below the sulfur limit. In the JBAB response letter dated 12/7/15 (**see CAA attachment #1A**) to EPA's Information Request Letter, JBAB reported the fuel oil in Tank 6 has not been used since the lock out of the tank, that the nine tanks are not interconnected, and the fuel oil in these tanks has not been used in any other equipment other than the boilers in the Central Utility Plant.

The AA and BAFB Title V Permits covered 53 stationary and mobile EGs that were present when the permits were issued. One of the conditions in the Title V Permits stated "Permittee must keep a log of date and time generators are operated and type and quantity of fuel used". The PTCOs for EGs issued after 2009 added requirements for noting the reason for each start-up of each EG and keeping records of the results of any visible emissions monitoring performed, but do not require the type and quantity of fuel to be noted for each EG. Instead, delivery receipts with data on the fuels or analyses for all fuel deliveries for EGs must be maintained by the Facility. The issuance of one new renewal Title V Permit for JBAB will hopefully give the Facility one set of consistent permit requirements for all the EGs.

The operating logs kept for the EGs maintained by the PWD were generally consistent for all the EGs and consisted of recording observations on visible emissions and the date and time EGs were operated, but not the reason for each startup. In addition, the type and quantity of fuel used each time the EGs were run were not recorded, although Ms. Riggs and Mr. Foster reported all fuel delivered for all the EGs in JBAB was Ultra Low Sulfur Diesel Fuel (ULSD) with less than 15 ppm of sulfur. The Facility also maintains fuel delivery receipts containing supplier analyses of sulfur for deliveries to the EGs.

According to Eric Foster, Power Support Systems Mechanic for PWD, preventive maintenance of the EGs they maintain is tracked using the Maximo system. The monthly maintenance Work Order Report for EGs contained in the JBAB response letter dated 12/7/15 (**see CAA attachment #1A**) to EPA's Information Request Letter lists several inspection and maintenance items for the EGs. Mr. Foster reported all the EGs have non-resettable operating meters and he provides the operating data to Ms. Riggs for reporting to DDOE and EPA. Mr. Foster also said all EGs operate for less than 500 hours per year because the electric utility is reliable.

EMCOR, and Mr. Musgrove in particular, are responsible for maintaining and checking the nine EGs at DIA including looking for visible emissions. Mr. Musgrove does this monthly and records the date and hours operated on daily sheets that go into a computer program, but there is no log per se, and the reason for startup is not indicated. The EGs are also maintained quarterly by a subcontractor that checks and changes oil, belts, and air filters. Fuel usage is only tracked on a monthly basis and not by individual EGs. One EG had been operated 547 hours since it was

installed in 2007 and the rest had all been operated less than 500 hours since they were installed between 2005 and 2012, according to a spreadsheet prepared by JBAB and sent to DDOE on 9/26/12.

Mr. Musgrove reported that three EGs at Bldg. 6000A were not burning properly and had visible emissions in 2013 (the 2013 Annual Report indicated it occurred on 3/15/13). Mr. Musgrove blamed the problems on not loading the EGs adequately when testing them. DIA then installed a load bank controller to increase the load during testing to clean out the exhaust. These initial releases were reported to DDOE in a letter dated 3/18/13 and there have been no problems since the corrective actions were implemented, per Mr. Musgrove and Ms. Riggs.

According to JBAB representatives, most of the ACR units on the BAFB side of JBAB are maintained by the PWD HVAC Shop and the ACR units on the AA side and DIA are maintained by EMCOR. Mr. Prescott first met with Ronald Palmer, Maintenance Mechanic Supervisor for PWD on 9/2/15 who had an inventory of ACR units with the type and quantity of refrigerant identified in each unit. PWD uses a form for recording key data from all service calls on ACR units that have recovery and addition of refrigerants. Mr. Prescott looked through the completed forms back to July 2008 and only a few forms were missing the date the problem was first identified or when the service was completed or other key data, but this appeared to be for ACR units with less than 50 pounds of refrigerant. In addition, when Mr. Prescott was visiting the Bldg. 18 BAFB Utility Plant, Mr. Wrenn reported that the four large chillers with 940 pounds each of R123 had not had any leaks in at least the last three years he has been the Plant Supervisor.

According to Mr. Palmer, 11 people have passed universal air conditioning refrigerant training and he had copies of their training certificates. Mr. Palmer showed Mr. Prescott three of the refrigerant recovery units they had which were relatively new and were approved for recovering refrigerants. After the inspection, Ms. Riggs provided copies of two Refrigerant Recovery or Recycling Device Acquisition Certifications for PWD sent to EPA on 7/31/03 and 8/15/06.

Mr. Prescott met with Mr. DeGroat, Mr. Welborn, and Ms. Stack on 9/3/15 who are part of the EMCOR staff that services ACR units in DIA. These three people, as well as other EMCOR employees, have passed universal air conditioning refrigerant training and had their training certificates. According to Mr. DeGroat, EMCOR employees only work on the small ACR units and they bring in subcontractors to work on the bigger units, including five large chillers with around 1900 pounds each of R123 and several other large chillers with about 500 pounds of R410a.

EMCOR maintains a monthly log dating back to December 2013 which tracks the date, quantity, and ACR unit for refrigerant recoveries and additions, and the reasons for these recoveries and additions. According to Mr. DeGroat, the five largest chillers were installed in 2009 and have not had any leaks except for a leak that occurred in Chiller #1 in July 2014. Mr. DeGroat reported all of the remaining refrigerant in Chiller #1 (1,100 pounds of R123) was recovered about a week after the leak was identified, although this was not shown in the monthly log at the time of the inspection because it was done by a subcontractor.

In the JBAB response letter dated 12/7/15 (see **CAA attachment #1A**) to EPA's

Information Request Letter, JBAB reported that a total of 1,652 pounds was recovered from Chiller #1 which normally would have a charge of 1,900 pounds (copies of the contractor's records were also provided that documented the quantities of R123 refrigerant recovered). Consequently, it appears that 13% of the refrigerant in the unit leaked which is below the applicable regulatory threshold for comfort cooling (15%) which potentially could have been applicable to this leak. Mr. DeGroat stated Chiller #1 still did not contain any refrigerant because the subcontractor is continuing to try to find the leak in the unit.

After the inspection, Ms. Riggs provided copies of two completed Refrigerant Recovery or Recycling Device Acquisition Certification forms for EMCOR that were sent to EPA on 6/18/12 and in 2013 (exact date not shown in the document).

Resource Conservation and Recovery Act – Underground Storage Tanks

The RCRA Underground Storage Tanks component of the multi-media inspection was conducted by EPA Inspector Justin Young (EPA Inspector). The inspection covered the fully regulated underground storage tanks detailed in **Table 1**. The inspection included the physical inspection of each tank, which encompassed opening each tank opening, along with observing any potential ancillary equipment associated with overfill or tank/line leak detection. The EPA Inspector also reviewed any potential records associated with tank specifications, line and tank leak detection. All of the tanks in table 1 were observed by the EPA during the inspection. Federal Facility entities whose debts and liabilities are the debts and liabilities of the United States are exempt from financial responsibility portion of the UST regulations. The EPA Inspector was accompanied by Facility representative, Mr. David May.

Table 1
UST & Piping Details for JBAB

Tank #	Material Stored	Capacity (Gal.)*	Installation Date*	Tank Construction Material*	Piping Construction Material
JBAB Marina	Gasoline (Mid-Grade)	6,000	May 2011	DW FRP tank	Fiberglass
AAFES Shoppette Tank #1	Gasoline (Regular Grade)	12,000	July 1994	DW FRP tank	Geoflex
AAFES Shoppette Tank #2	Gasoline (Regular Grade)	12,000	July 1994	DW FRP tank	Geoflex
AAFES Shoppette Tank #3	Gasoline (Premium Grade)	12,000	July 1994	DW FRP tank	Geoflex
AAFES Shoppette Tank #4 (manifolded to tank #1)	Gasoline (Regular Grade)	12,000	August 1996	DW FRP tank	Geoflex
Military Fuel Station	Gasoline (Regular Grade)	10,000	2001	DW FRP tank	Fiberglass

Military Fuel Station	E-85	10,000	2001	DW FRP tank	Fiberglass
Military Fuel Station	Biodiesel	10,000	2001	DW FRP tank	Fiberglass
DIA	Fuel Oil	15,000	1990	DW composite	Fiberglass
DIA	Fuel Oil	15,000	Unknown	DW FRP tank	Fiberglass

*Based on tank data from facility

Inspection Observations/Issues of Concern

JBAB Marina (building 2482)

Marina tank (Gasoline) has five (5) openings located above the tank. The first opening over the tank was an interstitial sensor/probe. The second opening over the tank was a vapor recovery pipe. The vapor seal appeared intact. The third opening was an empty pipe riser. The fourth opening over the tanks was a fill pipe with spill bucket installed. At the time of the inspection, the fill pipe spill bucket was dry. The EPA Inspector did observe a flapper valve installed in the fill pipe. The fifth opening over the tank was the tank manway with a submersible turbine pump (STP) and a mechanical line leak detector (MLLD). Based on this observation, the marina tank is a pressure system. The EPA Inspector observed the MLLD to be a FE Petro brand. Also located in the tank manway was a sump sensor along with fiberglass piping leading from the manway. There also appeared to be an ATG sensor installed within the manway (**see RCRA-I photo #1**).

Dispenser

The EPA Inspector observed a single dispenser associated with the marina tank. The dispenser had a sump sensor installed and appeared dry.

Tank Release Detection

The EPA Inspector met with Marina Manager, Peter Samuelson. The EPA Inspector reviewed the tank leak detection records associated with the marina tank. The Facility utilizes a Veeder Root TLS-300C as their method of tank release detection. At the time of the inspection,

the system was indicating all functions normal. Based on the system printout, the unit provides for a greater than 95% probability of leak detection of 0.20 gallons per hour (gph) with a probability of false alarm of less than 5%. The ATG test results indicate the Veeder Root system is conducting a continuous statistical leak detection (CSLD) test. At the time of the inspection, the EPA Inspector was able to observe tank leak test printouts for twelve consecutive months from October 2014 through September 2015.

Piping Release Detection

The Facility had mechanical line leak detectors installed on each of the tanks as a primary form of line leak detection. The Facility also stated they had line tightness testing as the second form of line leak detection. Based on document review by the EPA Inspector, the marina tank LLD's were tested by a third party (ARGO) in December 1, 2014 and received a passing test. Along with this documentation, the Facility provided the EPA Inspector with a passing 0.1 gph line tightness test also performed on December 1, 2014 by ARGO (see **RCRA-I attachment #1**).

Spill/Overfill

A spill buckets was present for the UST. The spill bucket associated with the tank appeared dry at the time of the inspection. The EPA Inspector did observe flapper valves installed in the fill pipe for overfill protection.

Cathodic Protection

The tank, based on Facility information was a double walled FRP tank.

Tank Registration

At the time of the inspection, the Facility had a certificate of tank registration from DOEE detailing 1 6,000-gallon UST tank storing gasoline.

Training

The EPA Inspector observed Mr. Samuelson had an A/B operator certification of training related to UST's dated December 19, 2012 by API safe.

AAFES Shoppette (building 1311)

The AAFES Shoppette is a gas station that has four gasoline tanks.

Tank #1 (regular gasoline) has five (5) openings located above the tank. The first opening over the tank was a tank manway with an STP. Based on this observation, the marina tank is a pressure system. Within the manway there was also a MLLD (FX1V) and a sump sensor installed. The piping leading from the manway was observed to be Geoflex piping. The manway was dry

during the inspection. The second opening over the tank could not be opened, but it was stated to be where the ATG sensor was located. The third opening was an interstitial sensor/probe. The fourth opening over the tank was a vapor recovery pipe with a seal that appeared intact at the time of the inspection. The fifth opening over the tank was a fill pipe with a spill bucket. At the time of the inspection, the fill pipe spill bucket was dry. The EPA Inspector did observe a flapper valve installed in the fill pipe.

Tank #2 (regular gasoline) has six (6) openings located above the tank. The first opening over the tank was a piping sump with green Geoflex piping. There was a sump sensor installed. There was also some liquid in the sump (see **RCRA-I photo #2**). The second opening over the tank is the tank manway with a Red Jacket STP and a MLLD. Based on this observation, the tank is a pressure system. Within the manway there was also a sump sensor installed. The piping leading from the manway was observed to be Geoflex piping. There manway was dry during the inspection. The third opening over the tank was and ATG sensor/probe. The fourth opening over the tank was an interstitial sensor/probe. The fifth opening over the tank was a vapor recovery pipe with a seal that appeared intact at the time of the inspection. The fifth opening over the tank was a fill pipe with a spill bucket. At the time of the inspection, the fill pipe spill bucket was dry. The EPA Inspector did observe a flapper valve installed in the fill pipe.

Tank #3 (supreme gasoline) has five (5) openings located above the tank. The first opening over the tank was a tank manway with a Red Jacket STP. Based on this observation, the tank is a pressure system. Within the manway there was also a MLLD and a sump sensor installed. The piping leading from the manway was observed to be Geoflex piping. There manway was dry during the inspection. The second opening over the tank was an ATG sensor/probe. The third opening was an interstitial sensor/probe. The fourth opening over the tank was a vapor recovery pipe with a seal that appeared intact at the time of the inspection. The fifth opening over the tank was a fill pipe with a spill bucket. At the time of the inspection, the fill pipe spill bucket was dry. The EPA Inspector did observe a flapper valve installed in the fill pipe.

Tank #4 (Regular – yellow markings) has five (5) openings located above the tank. The first opening over the tank was a tank manway opening (see **RCRA-I photo #3**). The EPA Inspector did not observe a STP. Mr. May stated the tank is manifolded to tank #1. Within the manway the EPA inspector observed a sump sensor. The manway was dry at the time of the inspection. The second opening over the tank was an ATG sensor/probe. The third opening over the tank was a vapor recovery pipe with a seal that appeared to be intact and operating. The fourth opening over the tank was the fill pipe with spill bucket. At the time of the inspection, the fill pipe spill bucket that was dry The EPA inspector observed a flapper valve installed in the fill pipe. The fifth opening over the tank was an interstitial sensor/probe. There were also two observation wells located within the tank field and one vent pipe.

Dispensers

There were a total of 12 dispensers, which blended the fuel at the dispensers. The EPA inspector observed dispensers 3/4, 5/6 and 7/8. At the time of the inspection, the dispensers appeared dry and had a small sump sensors installed.

Tank Release Detection

The EPA Inspector met with Assistant Manager, Mr. Phillip Hinojosa. The EPA Inspector reviewed the tank leak detection records associated with the AAFES tanks. The Facility utilizes a Veeder Root TLS-350 as their method of tank release detection. At the time of the inspection, the system was indicating a high liquid alarm (L1 and L4). Mr. Phillip Hinojosa stated this was because of the heat and humidity. Based on the system printout, the unit provides for a greater than 95% probability of leak detection of 0.20 gallons per hour (gph) with a probability of false alarm of less than 5%. The ATG test results indicate the Veeder Root system is conducting a CSLD test. At the time of the inspection, the EPA inspector was able to observe tank leak test printouts for twelve consecutive months from October 2014 through September 2015.

Piping Release Detection

The Facility had mechanical line leak detectors installed on each of the tanks as a primary form of line leak detection. The Facility also stated they had line tightness testing as the second form of line leak detection. Based on document review by the EPA inspector, the AAFES LLD's were tested by a third party (Baker) on May 28, 2014 and received a passing tests. Along with this documentation, the Facility provided the EPA inspector with a passing 0.1 gph line tightness test also performed on May 28, 2014.

Spill/Overfill

Spill buckets were present for all the UST's. The spill bucket associated with the tank appeared dry at the time of the inspection. The EPA inspector did observe flapper valves installed in the fill pipe for overfill protection.

Cathodic Protection

Based on tank data from facility were fiberglass tanks.

Training

The EPA inspector observed that Mr. May and Mr. Valasquez of AAFES each had an A/B operator certification of training related to UST's.

Military Fuel Station (building 365)

Building 365 is a fueling location for government vehicles.

Tank #1 (Gasoline- MRR) has four (4) openings located above the tank. This tank is physically located in the middle of the tank field with a tank on each side. The first opening over the tank was a tank manway with an ATG sensor/probe (**see RCRA-I photo #4**). Within the manway there was a sump sensor and fiberglass piping leading from the manway. The EPA inspector did not observe a STP or LLD. There was some minimal amount of liquid in the sump. The second opening over the tank was a vapor recovery pipe, with a seal that appears intact. The third opening was the fill pipe with spill bucket. At the time of the inspection, the fill pipe spill bucket was dry. The EPA inspector did observe a flapper valve installed in the fill pipe. The fourth opening over the tank was an interstitial sensor/probe.

Tank #2 (E-85) has four (4) openings located above the tank. The first opening over the tank was a tank manway with an ATG sensor/probe (**see RCRA-I photo #5**). Within the manway there was a sump sensor and fiberglass piping leading from the manway. The EPA inspector did not observe a STP or LLD. There was some minimal amount of liquid in the sump (approximately 1 inch). The second opening over the tank was a vapor recovery pipe, with a seal that appears intact. The third opening was the fill pipe with spill bucket. At the time of the inspection, the fill pipe spill bucket had some trace amount liquid. The EPA inspector did observe a flapper valve installed in the fill pipe. The fourth opening over the tank was an interstitial sensor/probe.

Tank #3 (Regular – Bio diesel) has four (4) openings located above the tank. The first opening over the tank was a tank manway with an ATG sensor/probe (**see RCRA-I photo #6**). Within the manway there was a sump sensor and fiberglass piping leading from the manway. The EPA inspector did not observe a STP or LLD. The manway sump was dry. The second opening over the tank was a pipe riser. The third opening was the fill pipe with spill bucket. At the time of the inspection, the fill pipe spill bucket had two inches of liquid. The EPA inspector did observe a flapper valve installed in the fill pipe. The fourth opening over the tank was an interstitial sensor/probe.

The EPA Inspector observed nine monitoring wells and three vent pipes associated with the tank field.

Dispenser

The EPA Inspector observed each of the four dispensers associated with the military fuel station tanks. Dispensers #3 and #4 were associated with the diesel tank, dispenser #2 was associated with the E-85 tank, and Dispenser #1 was associated with the MRR gasoline tank. Fuel pumps and check valves were observed by the EPA inspector in the housing of dispensers #3(**see RCRA-I photo #7**) and #4. The dispenser sump was dry, but the EPA Inspector did not observe a sump sensor. Dispenser #2 had a pump located within the housing, along with a check valve, but did not have a sump sensor (**see RCRA-I photo #8**). Dispenser #1 had a pump located within the housing, along with a check valve, but did not have a sump sensor. Both dispensers #1 and #2 had dry sumps at the time of the inspection.

Tank Release Detection

The EPA Inspector reviewed the tank leak detection records associated with the military fueling station. The Facility utilizes a Veeder Root TLS-350 as their method of tank release detection. At the time of the inspection, the system was indicating an alarm (T3 high water alarm). Based on the system printout, the unit provides for a greater than 95% probability of leak detection of 0.20 gallons per hour (gph) with a probability of false alarm of less than 5%. The ATG test results indicate the Veeder Root system is conducting a CSLD test. At the time of the inspection, the EPA inspector was able to observe tank leak test printouts for seven of the past twelve consecutive months. At the time of the inspection, the Facility did not have leak detection printouts with a passing test for the months of July and January 2015. For the months of October, November, and December 2014, the Facility had a third party tank pressure tightness test from ARGO, which indicated the tanks passed.

Piping Release Detection

The EPA Inspector did not observe the tanks associated with the military fueling station to have either a mechanical or electrical line leak detectors installed on any of the tanks as a primary form of line leak detection. The Facility stated the tanks were based on a safe suction system. The Facility provided the EPA Inspector with a passing 0.1 gph line tightness test also performed on December 1, 2014 by ARGO. Only the E-85 tank was confirmed to be a safe suction system (**see RCRA-I attachment #2**). At the time of the inspection, the Facility did not have any records associated with line leak detection for the diesel and gasoline tanks.

Spill/Overfill

A spill buckets was present for each of the UST. The spill bucket associated with the E-85 tank had some minimal liquid and the spill bucket associated with the bio-diesel tank had approximately 2 inches of liquid. The EPA Inspector did observe flapper valves installed in the fill pipes for overfill protection.

Cathodic Protection

Based on tank data from facility these tanks were double walled FRP tank and this information correlated to a third party preventative maintenance test conducted in 2014.

Tank Registration

At the time of the inspection, the Facility had a list of registered tanks onsite and the three tanks associated with the military fuel station were on the list.

Training/walk around

The EPA inspector observed Mr. Mays had an A/B operator certification of training related to UST's dated July 12, 2013 by API safe. Mr. Angelito Macapanan, who was overseeing the

military fuel station at the time of the inspection, stated he had a class C operator license. Mr. Macapanan stated he does a monthly walk around of the tanks to look for water, but does not record this information.

DIA (building 6000)

The DIA is a tenant located on the grounds of JBAB. The EPA inspector met with Environmental Compliance Manager, Ms. Renee Robinson. It was stated that DIA has 2-15,000 gallon emergency generator (EG) UST's. The UST's are connected to a larger system that includes AST's, which in turn feed day tanks for use in boilers, generators or hot water generation. This was stated by DIA to be a backup system, which normally operates on natural gas. It was also stated that building 6000A has a penthouse with generators that pull from the UST's to fill day tanks to feed the generators. During the physical inspection of the UST's the EPA inspector met with Facilities Manager, Mr. Jonathon Crittenden.

Tank #1 (EG) has five (5) openings located above the tank. The first opening over the tank was an empty pipe riser. The second opening over the tank was the fill pipe with spill bucket. At the time of the inspection, the fill pipe spill bucket was dry. The EPA inspector did not observe a flapper valve installed in the fill pipe. The third opening over the tank was a tank manway. Within the manway there was an STP with an ATG sensor. The EPA inspector did not observe a mechanical or electronic LLD. There was a sump sensor installed in the manway sump. The fourth opening over the tank had two STP's. The EPA inspector did not observe a mechanical or electronic LLD. There was a sump sensor installed in the manway sump. The fifth opening over the tank was an interstitial sensor/probe.

Tank #2 (EG) has five (5) openings located above the tank. The first opening over the tank was an empty pipe riser. The second opening over the tank was the fill pipe with spill bucket. At the time of the inspection, the fill pipe spill bucket was dry. The EPA inspector did not observe a flapper valve installed in the fill pipe. The third opening over the tank was a tank manway. Within the manway there was an STP. It was stated by the Facility the STP was used to pump fuel back and forth between the UST and AST. The EPA inspector did not observe a mechanical or electronic LLD. There was a sump sensor installed in the manway sump. There was some liquid in the manway at the time of the inspection. The fourth opening over the tank had two STP's. It was stated by Facility personnel the STP's were used to pump fuel to the building. The EPA inspector did not observe a mechanical or electronic LLD. There was a sump sensor installed in the manway sump. The fifth opening over the tank was an interstitial sensor/probe.

Dispenser

The tanks are associated with a backup system and are not connected to any dispensers.

Tank Release Detection

The tanks are managed by the Facility as emergency generators. The Facility does have a leak detection system installed (Pneumercator TMS 3000). The chief engineer, Mr. Richard

DeGroat also stated he goes around and does a check on multiple tank inspection points. Ms. Robinson stated she keeps a record of the tanks for leak detection on a monthly basis.

Piping Release Detection

The tanks are managed by the Facility as emergency generators. The Facility does not have line leak detection equipment (MLLD or PLLD) installed on the system.

Spill/Overfill

Spill buckets were present for the UST's. The spill buckets associated with the tanks appeared dry at the time of the inspection. The EPA Inspector did not observe flapper valves installed in the fill pipes for overfill protection. It was later noted in records review of the design specifications for the EG's at DIA, that they had ball float valves installed in the fill pipes. The EPA inspector could not directly correlate the design drawings to the physical tanks observed at DIA.

Cathodic Protection

The tank, based on tank data from facility were double walled FRP tank and DW fiberglass.

Resource Conservation and Recovery Act – Hazardous Waste

The RCRA hazardous waste component of the multi-media inspection was conducted by Inspector James Kline (Inspector Kline). Mr. Phillip Williams (Mr. Williams) escorted Inspector Kline through the visited tenant areas on JBAB. Inspector Kline requested to inspect all areas on JBAB that generated hazardous wastes. The following areas were not accessed by the EPA inspector due to additional personally identifiable information (PII) requirements, which conflicted with EPA's policy regarding releasing PII as a condition of access: US Secret Service (USSS) and the White House Communications Agency (WHCA). Mr. Williams stated he has e-mail records of all of the requests made for access.

As a LQG of hazardous wastes, the Facility is assigned RCRA identification number DC9570090036 from the Washington, DC. Department of Energy & Environment (DOEE). Mr. Williams stated the Facility currently maintains two- Less than 90-Day Hazardous Waste Storage Areas, two universal waste storage areas and various satellite accumulation areas. Mr. Williams stated that hazardous waste is not stored beyond ninety days at the Facility. Typically, hazardous wastes are picked up from the Facility every thirty days. HazTrain, Inc. is a Naval Contractor, who provides hazardous waste services for the Facility. Tradebe also provides hazardous waste services to the Facility. HazTrain, Inc. has employees who work full-time at the Facility.

Inspection Observations*Building 1300- Medical Clinic*

On Wednesday September 2, 2015, Mr. Williams escorted Inspector Kline to the Medical Clinic. Inspector Kline was introduced to SSGT Chaquila Brown, Interim NCOIC. SSGT Brown stated the only hazardous waste generated at the Medical Clinic comes from the Lab located in room 151. Inspector Kline observed an approximately 500ml plastic bottle with a hazardous waste label dated 26 August, 2015 (**See RCRA-C Photo #1**). The bottle was being used to collect used slide stain.

Building 1300- Dental Clinic

Mr. Williams escorted Inspector Kline to the Dental Building operated by the 579th Medical Group. MSGT Michele Tanner is the acting Superintendent. Ms. Otha Miller, Facility Manager, is the Environmental Coordinator. Located in room 247 is the Lab, where hazardous waste amalgam is stored in a black 5-gallon container (**See RCRA-C Photo #2**). The container had an attached closed lid and was labelled as hazardous waste. A waste amalgam pick-up sheet shows the dates and the amounts of wastes that were removed from the container (**See RCRA-C Photo #3**). According to the sheet, amalgam is removed three to five time a month.

Building 1300- Pharmacy

Inspector Kline was escorted to the Pharmacy located in room 119 and was introduced to MAJ Kelly, Officer In-Charge and SSGT Noga, Pharmacy Technician. Inspector Kline requested a listing of the medication that were on-hand to determine if expired medications were P or U listed hazardous wastes. SSGT Noga stated she does the inventories for the Pharmacy including expired medications. SSGT Noga showed Inspector Kline the expired medications and stated they were expired, but not hazardous waste (**See RCRA-C Photo #4**). A plastic bin marked "Expired Med" was full of medications and there were additional boxes of medications immediately adjacent to the plastic bin. Inspector Kline asked if the expired medications were stored in a particular area or an identifiable marked area. SSGT Noga stated there was not a particular space designated as storage of hazardous wastes or expired medications and that they had, "no luxury of space." Inspector Kline requested an inventory of the expired medications and documentation from Pharmalogistics for credits of returned expired medications. An inventory was later provided (**See RCRA-C attachment #1**).

Building 17- Medical Annex

Inspector Kline was escorted through the Medical Annex. There was only one container of waste universal waste bulbs stored in room 122C. The container was labelled universal waste (**See RCRA-C Photo #5**) and had a start accumulation date of April 17, 2015 (**See RCRA-C Photo #6**).

Building 421- Hazardous Waste Storage (indoor)

Building 421 is one of two, less than 90-Day Hazardous Waste Storage Areas located on the Facility. Mr. Williams introduced Inspector Kline to Mr. Phil Mauro, Lead Environmental Technician, contractor employed by HazTrain, Inc. Mr. Mauro introduced the following four individuals who were present:

1. Mr. Anthony Graft, Environmental Technician- HazTrain, Inc.
2. Mr. Alexander Hoffer, Government Services Field Chemist- Tradebe
3. Mr. Phil Choe, Government Services Field Chemist- Tradebe
4. Ms. Tina Moncrief, EPX DLA Contracting
5. Mr. Scott Reed, Lead Environmental Technician- HazTrain, Inc.

Inspector Kline spoke with each individual and each described their duties and responsibilities. After speaking with each individual, Inspector Kline requested (through Mr. Williams) copies of training records be provided for review during the administrative review portion of the inspection.

Building 421 is mainly partitioned into chain-linked caged rooms belonging to various Facility tenants. Mr. Mauro escorted Inspector Kline to the hazardous waste storage area located inside Building 421. A hazardous waste inventory database along with start accumulation dates is maintained by Mr. Mauro. All containers are assigned a numeric identifier for internal tracking. Inspector Kline observed a total of eighteen boxes of universal waste lamps. Sixteen of the boxes were located within the chain linked caged area (**See RCRA-C Photo #7**). Of those

sixteen boxes, the oldest start accumulation date was August 13, 2015 (**See RCRA-C Photo #8**). Outside the room, Inspector Kline observed the two remaining universal waste storage boxes (**See RCRA-C Photo #9**). The largest box had the oldest start accumulation date of June 17, 2015 (**See RCRA-C Photo #10**). All hazardous waste containers were properly labelled and individually marked with start accumulation dates. Mr. Mauro stated that weekly inspections are conducted for Building 421 and previously conducted inspection reports were kept in Building 41. Inspector Kline stated that he would review weekly inspections that were conducted during the Records/Administrative Review Portion on the last day of the inspection.

Within the hazardous waste storage area, Inspector Kline observed three storage sheds. The door of one of the storage shed was marked, "HAZSTOR Hazardous Materials Storage" (**See RCRA-C Photo #11**). The second and third sheds were marked #2 and #3. Inspector Kline requested access to each shed. Mr. Mauro stated the HAZSTOR shed was a Navy asset and that he did not have access, nor did he know what was stored within any of the sheds. Mr. Mauro was successful in finding a contact person who could arrange to have the HAZSTOR shed opened. Mr. Nick Cristaudo did arrive to grant access for Inspector Kline. The shed was being used to store office cabinets and was not used for the storage of hazardous wastes. Inspector Kline suggested that the marking on the entry door be removed or covered. Mr. Mauro and Mr. Williams stated that once they could reach the tenant owners of the remaining two sheds, they would arrange for Inspector Kline to have access.

While leaving the hazardous waste storage area, Inspector Kline observed some of the contents in the other chain linked rooms in the adjacent general areas of Building 421. These rooms were not under the control of Mr. Williams or Mr. Mauro. Specifically observed in one caged room was an open box with used fluorescent bulbs sticking out (**See RCRA-C Photo #12**). The metal handle of a walking tape reel was directly leaning against some of the bulbs and created the potential for the bulbs to become broken. Inspector Kline saw a gentleman in the room who identified himself as Mr. Larry Vaseleck who was a MWR Facilities Worker. Mr. Vaseleck stated the contents of the room belonged to MWR and that the room was used for storage of MWR maintenance equipment. Mr. Vaseleck stated that he thought the bulbs were bad. Inspector Kline asked why the bulbs weren't taken to the hazardous waste storage area, which was located several feet from the MWR room. Mr. Vaseleck did not know why the bulbs weren't removed.

Building 421- Hazardous Waste Storage (outdoor)

Mr. Mauro escorted Inspector Kline to the two outdoor hazardous waste storage sheds located outside of Building 421 (**See RCRA-C Photos #13, #14, #15 & #16**). The storage sheds were identified as Building #1 and Building #2. Emergency phone numbers and contact information were clearly posted on both sheds. Both sheds are managed as less than 90 day hazardous waste storage areas. During the inspection, neither shed had hazardous waste stored inside. Mr. Mauro stated that inspections are conducted on a routine basis and that copies of inspection reports would be made available during the administrative review portion of the inspection.

In the far end of the parking lot adjacent to the outdoor hazardous waste storage sheds, Inspector Kline observed two 20-yard open-top roll-off trash containers. Inspector Kline observed the contents of each roll-off. One of the roll-offs had a broken fluorescent bulb which was in an open cardboard box (**See RCRA-C Photo #17**). Both Mr. Williams and Mr. Mauro had no idea why the broken bulb was disposed of in this manner. Mr. Williams said the broken bulb would be removed. The overwhelming majority of the contents of both roll-offs was already broken-down cardboard boxes, that could be recycled (**See RCRA-C Photo #18 & #19**). Mr. Williams stated that the contents of the roll-offs would not be recycled as the cardboard was going out as trash.

Adjacent to the two roll-offs were a storage conex box, green trash dumpster and a grey open-topped 55-gallon Rubbermaid plastic trash barrel (**See RCRA-C Photo #20**). Inspector Kline observed what appeared to be a rusty aerosol can of AeroKroil disposed of inside the trash barrel (**See RCRA-C Photo #21**). Mr. Williams stated the can would be removed as waste aerosol cans are disposed of as hazardous waste.

Building 41- Hazardous Waste Pharmacy

Mr. Williams escorted Inspector Kline to the second of two, Less than 90 Day Hazardous Waste Storage Areas on the Facility, Building 41 is known as the Hazardous Waste Pharmacy. Both Mr. Anthony Graft and Mr. Phil Mauro transport hazardous wastes from throughout the Facility to Building 41.

Mr. Mauro described to Inspector Kline the hazardous waste operations process for Building 41. The first station visited was an area used to store universal wastes. All waste containers or boxes were placed on a secondary containment pallet (**See RCRA-C Photo #22**). Primarily, this pallet was for the storage of waste lead acid batteries. Universal wastes were properly labelled and had start accumulation dates marked. The oldest start accumulation date for all of the items on the pallet was August 27, 2015 (**See RCRA-C Photo #23**). Inspector Kline also observed two blue poly 55-gallon drums marked as hazardous wastes. One drum contained sulfuric acid and the contents of the second was a broken battery. A box marked "good batteries for reuse" was also stored on the same pallet.

Inspector Kline was escorted to the Flammable Storage Room. Inside this room was a yellow metal flammable storage cabinet. Eight containers labelled as hazardous waste were stored on the shelves of the cabinet (**See RCRA-C Photo #24**). There was a glass jar and a glass bottle of methanol stain among the other containers that had the same start accumulation date of August 27, 2015, which was the oldest date.

Mr. Mauro pointed out that the aerosol can that was previously observed in the trash located outside of Building 421 was brought to Building 41. The can was placed in a plastic bag and labelled as a hazardous waste and had today as a start accumulation date (**See RCRA-C Photos #25 & #26**). Mr. Williams stated that all waste aerosol cans are managed as hazardous wastes and that aerosol cans at the Facility are not punctured.

Inspector Kline finished the tour after visiting the Poison 6 Room, the Hazardous Waste “Stone” Shed and the Mechanical Room.

Additional Areas Inspected

Mr. Williams escorted Inspector Kline to the following areas:

1. Building 18, Heat Plant
2. Building P8, Auto Hobby Shop
3. Building 1311, Firestone and AAFES

Building 421- Hazardous Waste Storage (return)

Mr. Williams and Inspector Kline returned to gain access to the two locked storage sheds (#2 & #3) located in the hazardous waste storage area of Building 421. Mr. Pat Dougherty, Engineering Technician provided access to both storage sheds. Neither shed was used for the storage of wastes.

Building 397- Range Operations

Mr. Williams escorted Inspector Kline to the Range Operations located in Building 397. Inspector Kline was greeted by Mr. Mike Johnson from Range Operations and Mr. Bobby Shrestha, Armor. Mr. Johnson stated that weekly visits were conducted for the purpose of removing generated hazardous wastes.

Inspector Kline was escorted to the Cleaning Room and observed a black 55-gallon drum and a red 21-gallon metal container (**See RCRA-C Photo #27**). Both the drum and container had hazardous waste labels. The black drum label indicated the contents was lead debris with a start accumulation date of 7/27/15 (**See RCRA-C Photo #28**). The red container label indicated the contents was lead waste with a start accumulation date of 7/27/15 (**See RCRA-C Photo #29**). Inspector Kline observed an open-top blue 55-gallon plastic recyclable trash can located underneath a table used for cleaning weapons. The can was lined with a black plastic trash bag (**See RCRA-C Photo #30**). There was not an attached lid or a lid present in the room for the can. Inspector Kline observed the contents of the recyclable trash can (**See RCRA-C Photo #31**). The majority of the contents appeared to be oily paper towels. There were empty cardboard ammunition boxes and used cotton-tipped sticks from weapons cleaning. Mr. Shrestha stated the contents (the oily paper towels and Q-tips) came from weapons cleaning. Inspector Kline asked if the Facility made a hazardous waste determination for the contents of the recyclable trash can. Mr. Shrestha stated the contents were not hazardous wastes. Inspector Kline requested safety data sheets for all cleaning supplies used for weapons cleaning through Mr. Williams. The Facility later provided a SDS for Breakfree (**See RCRA-C attachment #2**) and a SDS for grease (**See RCRA-C attachment #3**).

Inspector Kline observed an orange shop vacuum (**See RCRA Photo # 32**). The label on the vacuum stated the contents was asbestos. Inspector Kline asked both Mr. Shrestha and Mr. Johnson if waste asbestos was generated in Building 397. Both gentlemen stated the vacuum was not used.

Inspector Kline asked Mr. Johnson and Mr. Shrestha how generated waste aerosol cans were managed within their building. Mr. Shrestha stated the waste aerosol containers are set on the shelf and HazTrain picks them up. Inspector Kline did not observe a particular station or identified area for waste aerosol cans. Mr. Shrestha stated no aerosol cans are disposed of in the regular trash.

Buildings 90 & 928- Marina & Outdoor Recreation

Mr. Pete Samuelson, Marina and Outdoor Recreation Manager, escorted Inspector Kline throughout the Marina and Outdoor Recreation Areas. Inspector Kline observed a yellow enclosed containment skid. Inside the skid were two 55-gallon drums. One of the drums was grey colored and contained used oil and was labeled 'used oil' (**See RCRA-C Photo #33**). The second drum was unmarked and was approximately half-full (**See RCRA-C Photo #34**). Mr. Samuelson stated the unmarked drum contained used gasoline and the drum marked used oil was appropriately labelled. Drained filters were would be collected in a grey 55-gallon plastic barrel with a yellow plastic liner (**See RCRA-C Photos #35 & #36**). The words "Used Filter" were spray painted on the lid and side of the barrel. Inside the plastic liner, Inspector Kline observed an empty plastic oil jug and used oil filter (**See RCRA-C Photo #37**). The Marina area was visited by Inspector Kline and Inspector Young also on September 3, 2015 as a follow-up concerning the 55-gallon drum containing used gasoline not being labelled. Mr. Williams stated that the container was later marked "used gasoline" and had a hazardous waste label.

Building 4412- Navy Lodge

The Navy Lodge was identified by Mr. Williams as having generated hazardous wastes. Mr. Williams escorted Inspector Kline to the Navy Lodge. Inspector Kline was introduced to Ms. Kathy Lee, General Manager, and Mr. Kevin Williams, Maintenance. Mr. Kevin Williams escorted Inspector Kline to the Maintenance Closet. Inspector Kline observed an open cardboard box containing a total of twenty-six used fluorescent bulbs (**See RCRA-C Photo #38 & #39**). Mr. Kevin Williams stated the bulbs were all bad. Inspector Kline observed that the cardboard box was marked "TRASH" on the one side (**See RCRA-C Photo #40**). There was not a start accumulation date marked on the box. Inspector Kline asked Mr. Kevin Williams and Ms. Lee if there was a log or data base that would identify the quantity and start accumulation dates for the used bulbs. Both answered no, the Lodge does not maintain a log or database. Inspector Kline counted a total of twelve "green-tipped" used bulbs. Inside the box, Inspector Kline observed three used circular fluorescent bulbs (**See RCRA-C Photo #41**). Mr. Kevin Williams stated those three circular bulbs were also bad.

DIA

Mr. Williams escorted Inspector Kline and Inspector Young to the DIA. Upon arrival, the Inspectors were introduced to Ms. Renee Robinson, Environmental Compliance Program Manager. The security personnel insisted that the Inspectors surrender their credentials. Both Inspectors refused and stated that neither were allowed to surrender their credentials. Ms. Robinson intervened and explained to the security personnel, that the inspection team was not allowed to surrender credentials or provide PII. After several minutes of delay, the inspection was allowed to proceed. Inspector Kline was informed by Ms. Robinson that photography was not permitted for any portion of the DIA Inspection. In the event photos would be necessary, Inspector Kline would request that the Facility provide photos specifically capturing only the concern.

Ms. Robinson introduced Inspector Kline to Richard DeGroat, DC First Class Engineer. Inspector Kline observed a universal waste bulb crusher that appeared to be dismantled. Mr. DeGroat stated the crusher was not in use. Inspector Kline was introduced to Mr. Ray Horak, EMCVOR Structural Lead Electrician. Inspector Kline observed three opened unmarked containers with used fluorescent bulbs. The containers did not have start accumulation dates. Mr. Horak stated the bulbs were all bad. Inspector Kline requested to Mr. Williams and Ms. Robinson that photos of only the three containers be taken to document the observation. Inspector Kline asked Mr. Horak if the DIA maintained a database or log of the quantity or start accumulation dates of the waste fluorescent bulbs. Mr. Horak stated no, there was no database or log. Mr. Horak stated the full containers are transferred to Mr. Greg Humbert, Dock Master, EMCOR. During the inspection, Inspector Kline interviewed Mr. Alester Isaacs, Electrician, and Mr. Tom Mustgrove. Both gentlemen stated that they handled the transfer and removal of the containers of waste bulbs. Inspector Kline asked if either gentleman had received any training on the handling of universal waste or training related to the management of universal wastes, both stated no.

Inspector Kline observed a used bulb from a video lamp labelled VDI. The lamp was identified as containing mercury. The bulb was in an open cardboard box with no lid. The following was printed on the outside of the cardboard box, "lamp contains mercury, dispose according to local or federal law." The cardboard box was not labelled as universal waste and did not have a start accumulation date. The cardboard box was inside of an open-top blue plastic recyclable bin. Inspector Kline asked Mr. Horak if the bulb was a waste. Mr. Horak stated it was bad and didn't work. Inspector Kline requested that the Facility provide photos of the bulb, the box in which it was observed and the blue plastic recyclables bin. Inspector Kline asked if the DIA maintained a data base or a log showing the start accumulation date. Ms. Robinson stated that the DIA does not maintain a database or log for universal wastes.

Inspector Kline was escorted to the Press Room and was introduced to Mr. Scott Sigwalt, Print Plant Supervisor, and Mr. Robert Cross, Pressman. Inspector Kline observed several aerosol cans in various sections of the Press Room. Inspector Kline asked both gentlemen how the used aerosol cans were managed once they were empty. Mr. Cross stated there wasn't a management program as they might generate maybe twelve used aerosol cans a year. Inspector Kline asked Mr. Cross how those twelve cans would be disposed. Mr. Cross stated they are probably thrown out in the trash.

Inspector Kline asked Mr. Sigwalt where hazardous wastes are generated for their operations. Mr. Sigwalt stated the press wash does generate wastes that are managed as hazardous wastes. The press wash is water miscible with a flammability 2 rating. The operations also include petroleum distillates, which after use is managed as hazardous waste. Mr. Sigwalt stated the overall operations of the press has decreased by approximately 90%. Inspector Kline also observed two red twenty-five gallon push-lid style containers that were identified for used oily rags.

This concluded the inspection for September 2, 2015.

Building 352B- Marine Motor T

On Thursday September 3, 2015, Mr. Williams escorted Inspector Kline and Inspector Young to the Marine Motor T. The Inspectors were introduced to SSG Tong Carlos and SGT Hayes. Inspector Kline observed four lead acid batteries that were marked, "BAD" (See **RCRA-C Photo #42**). Inspector Kline asked both Marines if they knew how long the waste batteries were stored there. SGT Hayes stated that he didn't know, maybe a week. Inspector Kline asked if a database or log was kept to show the accumulation start dates or quantities for generated universal wastes and both Marines stated no. Inspector Kline was escorted to the Hazardous Waste Generation Point. During the inspection, there was no hazardous waste being stored at that location.

Building 362- Transportation

Mr. Williams escorted Inspector Kline and Inspector Young to Building 362-Transportation. The Inspectors were introduced to Mr. William Bryant, Work Supervisor. Inspector Kline observed that the used oil containers used throughout the building were labelled as used oil and non-hazardous wastes (See **RCRA-C Photos #43 & #44**).

Mr. Bryant told the Inspectors that all used oil, gas and diesel filters, emptied quart containers of oil and oil drip pans were drained into a grated blue steel oil tank. The tank was labelled as used oil and had a 365-gallon capacity (See **RCRA-C Photo #45**). Inspector Kline asked approximately how much gasoline was stored in the used oil tank. Mr. Bryant stated that approximately one quart a month to maybe a gallon per year was disposed of in the used oil tank. Mr. Bryant said the used oil tank is connected to a larger used oil tank located outside the building. Inspector Kline observed the oil tank. It was labelled as "used oil" and had a 528-gallon capacity (See **RCRA-C Photo #46**).

This concluded the physical portion of the RCRA C Inspection.

Records/Administrative Review

The Records and Administrative Review was conducted by Inspector Kline and Inspector Young in Building #41 on September 3, 2015. Attending from the Facility were Mr. Phillip Williams and Mr. Phil Mauro. Inspector Kline requested waste determinations for possible asbestos and or lead paint for the building being demolished on September 3, 2015 (believed to be Building #106). This request was sent to Mr. Williams on September 3, 2015. Mr. Williams stated the Facility would provide the analytical reports once they were received. The Facility later provided copies of an analytical report for asbestos (**See RCRA-C attachment #4**) and copies of an analytical report for lead (**See RCRA-C attachment #5**).

Manifests

All Facility hazardous waste manifests were signed by Mr. Trenton London or Mr. Phillip Williams. Inspector Kline reviewed multiple hazardous waste manifests to observe that they had a RCRA ID number that was associated with the Facility. Along with this information, Inspector Kline observed a waste description, amount of waste, associated waste codes, signatures from the generator, transporter and designated facility, and corresponding LDR forms. As a representative sample, Inspector Kline requested manifest number 011198736 JJK (**See RCRA-C attachment #6**).

RCRA Training Records

Inspector Kline reviewed individual training records. As representative training record certificates, Inspector Kline requested copies be provided for Mr. Hoffer, Mr. Choe and Ms. Moncrief (**See RCRA-C attachments #7 & #8**).

Weekly Inspections

Inspector Kline reviewed weekly inspections conducted by the Facility. As representative samples, Inspector Kline requested a copy of the weekly inspections conducted at Building 421 (**See RCRA-C attachment #9**) and Building 41 (**See RCRA-C attachment #10**).

Clean Water Act - Stormwater

The Clean Water Act – Stormwater component of the multi-media inspection was conducted by EPA Inspector Michael Eller. At the time of the inspection, the Facility had NPDES permit coverage under the 2008 Multi-Sector General Permit (MSGP) for Storm Water Discharges Associated with Industrial Activity, but was applying for coverage under the 2015 MSGP. The Facility had separate NPDES permit numbers for the Anacostia (Navy) and Bolling (Air Force) sides of the Facility (a legacy from when JBAB was two separate installations): DCR05A757 (Anacostia) and DCR05A816 (Bolling).

The Facility's wastewater is discharged via sanitary sewer lines to D.C. Water and Sewer Authority's publically owned treatment works at Blue Plains. The Facility has an Industrial User Wastewater Discharge permit with DC Water and Sewer Authority. Pretreatment at JBAB consists primarily of oil – water separators in the vehicle maintenance areas, the commissary parking lot, and grease traps for wastewater discharge from cooking facilities.

Notices of Intent (NOI)

Separate Notices of Intent (NOI) for coverage under the 2008 MSGP were submitted by the Navy for Anacostia Naval Station and the Air Force for Bolling Air Force Base on 5 January, 2009 and 29 October, 2009, respectively. The inspector requested and received copies of the NOIs (see **CWA attachments #1a and #1b.**)

Facility Description

The Facility covers approximately 906 acres on the eastern bank of the Anacostia and Potomac Rivers. The Anacostia (Navy) side, located on the northern end of the Facility, covers approximately 300 acres, while the Bolling side (Air Force) covers approximately 600 acres. See **CWA attachment #2**, the sit map of the Facility's storm water drainage system, included in the Facility's Storm Water Pollution Prevention Plan (SWPPP). The NOIs for the Facility state that industrial areas exposed to storm water amount to 72 acres of the Anacostia (Navy) side and 600 acres of the Bolling side (Air Force). Storm water runs off into catch basins and curbside inlets, and is routed via underground pipes to thirty-four (34) storm water outfalls located along its western perimeter on both the Anacostia and Potomac Rivers. The inspector's count of 34 outfalls is based solely on counting outfalls shown in the SWPPP site map (**CWA attachment #2**), as the neither the total number of outfalls, nor the number of outfalls that drain areas of industrial activity, is explicitly mentioned in the SWPPP. At some outfalls, due to topography, some storm water is collected in underground sumps and pumped over the levees into the Potomac River by electric pumps. The Facility also has one (1) storm water detention basin.

Industrial Activity

Major industrial activity that has the potential to generate storm water pollutants was not common at JBAB at the time of the inspection. The activities on the Facility were mainly

administrative in nature, in addition to residential housing and billeting. The SIC code listed on the Facility's NOIs is 9711 (National Security). The NOIs identify the following industrial activities requiring coverage under a storm water permit:

Anacostia (Navy side) – NPDES permit reference # DCR05A757

- Sector AD – The Anacostia side of the Facility is designated as Sector AD, because it was designated by the Director as requiring a storm water permit.

Bolling (Air Force side) – NPDES permit reference # DCR05A816

- Sector O – Steam Electric Power Generating Facilities: The Facility has a high temperature hot water heating plant with oil-fired boilers. Heating fuel is stored in underground storage tanks. Glycol used for cooling buildings on the Facility is stored in above ground storage tanks at the heating plant.

- Sector P – Land Transportation: The Facility has a motor pool and vehicle repair shop (building 362) for its bus fleet. There is also a motor pool and repair facilities for vehicles belonging to the Washington D.C. Army National Guard, and U.S. Marine Corps heavy vehicles. In addition, the White House communications facility maintains vehicles for presidential communications.

- Sector Q – Water Transportation: The Facility has a marina at its southern end, on the Potomac River, where fueling, painting, power washing and engine maintenance can be done on private watercraft.

Additional industrial activities not listed in the NOIs are:

- Sector N Scrap Recycling and Waste Recycling: The Facility has a recycling center which accepts cardboard, plastic, glass, metal, and toner cartridges.

- Sector S – Air Transportation: Storm water pollutants may also be generated at the heliport for Marine Helicopter Squadron HMX-1 (also referred to as the “White House helicopter squadron”, “Marine One” or simply “HMX”). According to Facility representatives, major maintenance on the helicopters is not done at JBAB. At the time of the inspection, the heliport was not covered under the MSGP. Facility representatives Mr. London and Ms. Mertz stated that, in their Notice of Intent for coverage under EPA’s 2015 MSGP, the heliport would be included in the covered areas under Sector S (air transportation) due to deicing activity.

Construction Activity

At the time of the inspection, major construction work was being done on DC Water and Sewer Authority’s Blue Plains Tunnel, near storm water outfall WX. This project is a system of tunnels and diversion sewers, which pass under part of Joint Base Anacostia-Bolling, for the capture of combined sewer overflows. These tunnels are not owned or operated by the Facility.

The construction perimeter for this project partially obstructed the inspector's access to some of the Facility's storm water drainage system.

No other major earth disturbing construction activity was identified by Facility personnel at the time of the inspection.

Inspection Observations

The CWA NPDES Industrial Storm Water inspection included the following people:

U.S. EPA inspector: Michael P. Eller

District Department of the Environment representative: Isaac Kelley

Facility representatives: Melissa Mertz (NAVFAC)

Brooke Shaffer (NAVFAC)

The inspector took a total of 150 photos during the industrial storm water inspection. Some of the photos are duplicative, showing the same subject from different angles. 51 inspection photos are included in this report.

The inspection included the following:

1 September, 2015:

- 13:00 Opening conference with Facility personnel in building 370 and discussion of the Facility's regulatory status under the Clean Water Act NPDES storm water program.

- Review of the Facility's Storm water Pollution Prevention Plan (SWPPP) and NOIs

2 September, 2015:

- 09:19 inspection of the marina

- 10:40 inspection of outfalls EX and EAX

- 10:56 inspection of outfall 2008-01

- 11:09 inspection of Diversified Service Contracting (Facility's landscaping contractor) facility

- 12:36 inspection of bus / vehicle maintenance facility (building 362) and associated oil-water separators (13:10).

- 14:23 inspection of outfall PX

- 14:47 inspection of outfall QX

- 14:51 inspection of outfall SX

3 September, 2015:

- 08:44 inspection of outfall 016

- 08:52 inspection of outfall 017 and associated pumps

- 09:14 inspection of outfall 010

- 10:10 inspection of Washington D.C. Army National Guard vehicle maintenance facility (building 353).

- 11:05 inspection of storm water pond and security "moat" at the Defense Intelligence Agency building

- 13:07 inspection of oil -water separators in the Army and Air Force Exchange Service parking lot.

- 14:02 inspection of storm drain infrastructure in the vicinity of the heating plant

- 14:30 inspection of salt storage

- 14:45 inspection of recycling center
- 15:10 inspection of outfall WAX
- 16:30 closing conference in building 370

Weather and Precipitation

Weather conditions during the inspection were hot and humid, with a high temperature of 93° F on Thursday, 3 September, 2015. No significant precipitation fell in the 24 hours prior to the inspection or during the inspection. Rainfall did occur during a brief thunderstorm immediately after the closing conference on 3 September, 2015. Precipitation data from the NOAA Rain gauge at Washington Reagan National Airport, VA (GHCND: USW00013743) is shown below:

Date	Recorded Precipitation
31 AUG 2015	0.00
1 SEP 2015	0.00
2 SEP 2015	0.00
3 SEP 2015	Trace

Marina

The inspector observed the fueling pump located on a pier at the marina (**see CWA photo #1**). Fuel for boats is stored in a 6,000 gallon underground storage tank. The fill point for the UST is located approximately 170 feet north of the pier outside a chain link fence (**see CWA photo #2**). Mr. Mert Sayilkan, the marina's administrative assistant, stated that marina personnel are present any time fuel is purchased. Mr. Sayilkan also stated there was a spill of fuel on 7 June, 2013 when a boat sank at the marina. This resulted in a "small release" of fuel. The inspector inquired about the volume of the release, but Mr. Sayilkan could not specify. This incident was not in the copy of Facility's SWPPP submitted to the inspector, because the copy provided was last updated in May, 2012. The inspector observed a spill kit in a yellow overpack drum was present at the marina fuel point. The inspector opened the drum to examine the contents and observed gloves, absorbent socks and pads in good condition. The inspector moved northward to the UST fill point and observed a concrete pad with fill port and tank vents, located approximately 8 to 10 feet west of a paved parking area in a residential area (**see CWA Photo #2**). The inspector observed a curbside storm water inlet across the street from the UST fill point, but the inspector did not observe any spill kits or other means of protecting the storm drain staged in the area. Mr. Sayilkan stated that marina personnel are present in case of an accidental release, whenever fuel is being offloaded into the UST.

The inspector moved to the boat maintenance area of the marina. Mr. Pete Samuelson, marina manager, met with the inspector to answer questions about boat maintenance activities. Mr. Samuelson stated that some painting of boats and power washing of biological material is allowed in the parking lot area. The inspector observed one storm drain inlet in the parking area (**see CWA Photo #3**) located immediately adjacent to maintenance buildings at the southeastern corner of the marina embayment. A spill kit in an overpack drum was present nearby. The inspector observed a white substance (it appeared to be dried paint), in a spatter pattern on the pavement, leading to the

storm drain inlet. The inspector asked Mr. Samuelson to remove the inlet grate. Inside the storm drain, the inspector observed the remains of a torn fabric and mesh filter, along with garbage (see **CWA Photo #4**). The filter did not appear to be in working order. The inspector notes that Part 2.1.2.3 of the MSGP requires that if “control measures need to be replaced or repaired, you must make the necessary repairs or modifications as expeditiously as practicable.” Additionally, Section 5.1 of the Facility’s SWPPP calls for routine inspections to make sure that “structural controls (are) in working order.” Next, the inspector moved to the boat maintenance area, in a fenced yard just east of the parking lot area (see **CWA Photo #5**). Mr. Samuelson stated that touch up painting of boats is permitted in this area, but not spray painting. Outboard motor maintenance, as well as replacement of hydraulic oil for boat trailer brakes, also sometimes occurs in this area. The inspector observed a storm water inlet present along the west side of the boat maintenance area (see **CWA Photo #6**). Mr. Samuelson stated that, when boat maintenance is performed in this area, a drop cloth is laid down on the ground to catch any spilled liquids that might reach a storm drain. The inspector observed the drop cloth, rolled up, against the fence (see **CWA Photo #7**). The inspector notes the use of a drop cloth is consistent with the requirement to have “procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases.” However, the inspector did not observe any spill kits staged in the boat maintenance area, nor any other inlet protection other than the drop cloth.

Outfall EX

Outfall EX is located at the southeast corner of the marina embayment. The inspector observed a 2 to 3 foot diameter concrete headwall and pipe, partially submerged in the water, and a floating boom. Ms. Mertz stated the outfall is typically partially submerged at high tide, and there is low circulation in the embayment. The inspector detected no odors or visible sheens (see **CWA Photo #8**) but observed only a slight brown scum on the surface of the stagnant water.

Outfall EAX

Outfall EAX is located just to the north of outfall EX, along the marina embayment. The inspector observed a hard plastic or ceramic pipe, approximately 4 to 5 inches in diameter, mostly submerged by the rising tide. The water was stagnant, with a slight brown scum, and minor floating plant debris (see **CWA Photo #9**). Outfall EAX was inside the same floating boom as outfall EX. The inspector did not detect any odors, staining, or visible sheen.

Outfall 2008-001

Outfall 2008-001 is located just to the north of outfall EAX, at the marina. The inspector observed a broken PVC pipe, approximately 3 to 4 inches in diameter, just above the water line. Garbage brought in by the tide was present around the outfall, but the inspector observed no discoloration, staining, sheen, nor detected any odors (see **CWA Photo #10**).

Diversified Service Contracting yard

The Facility’s landscaping contractor, Diversified Service Contracting, has a building and lot adjacent to the south side of the marina. The inspector walked through the lot and observed

parked lawnmowers, skid steers, tractors, an excavator, a mulch pile, two dumpsters, and three 250-gallon plastic totes of road deicing brine. Only one of the totes contained brine and was approximately 75% full. The inspector also observed a strip drain, approximately 100 feet long, running east-west through the lot, in front of the entrance to the maintenance building. This strip drain was not shown on the storm water system map in the Facility's SWPPP. The yard was surrounded by either chain-link fence or concrete "Jersey" barriers (**See CWA Photo #11**). The inspector notes that Part 2.1.2.1 of the MSGP requires the Facility to minimize exposure of equipment to storm water, and that staging of vehicles such as tractors and lawnmowers outdoors may result in leaks. However, the inspector did not scrutinize the equipment for leaks. The inspector observed soil, sediment, lawn debris, and construction debris, as well as garbage, strewn on the pavement around the southern end of the yard (**see CWA Photos #12 and #13**). The inspector notes that Part 2.1.2.2 of the MSGP and section 3.2 of the SWPPP requires "good housekeeping" practices such as "sweeping" and "keeping materials orderly".

Building 362 (Bus and Gov. Vehicle maintenance)

Building 362 is an approximately 28,000 square foot building on the east side of the Facility, where maintenance work is done on the Facility's fleet of passenger buses and government vehicles (**see CWA Photo #14**). The building is situated in a large paved lot, with an area of roughly 213,000 square feet. According to Ms. Mertz and Building 362 supervisor, Mr. Mike McCoy, all of the maintenance work on vehicles (including oil changes and replacement of batteries) occurs indoors and is not exposed to storm water runoff. The inspector notes the practice of vehicle maintenance indoors is consistent with the requirements of Part 2.1.2.1 of the MSGP. Inside the building, the inspector observed two floor drains. One of the floor drains was a strip drain running through a bus maintenance bay (**see CWA Photos #15 and #16**). Facility representatives stated the floor drains are piped to the storm water drainage system. The floor drains observed by the inspector inside building 362 are not shown as inlets on the SWPPP map, so the inspector was unable to determine if the drains are piped to an oil/water separator outside the building. The inspector also noted that spill kits were present inside the building and in good condition (**see CWA Photo #17**), consistent with the requirements of Part 2.1.2.4 of the MSGP. In the parking lot on the south side of the building, the inspector observed evidence of iron oxide staining on the pavement, in a linear pattern towards a curb inlet on the western perimeter of the lot. The inspector observed that the staining originated at a rusting forklift parked outdoors (**see CWA Photos #18 and #19**).

In another part of the parking lot on the south side of building 362, the inspector observed a black stain on the pavement that appeared to be the residual from an oil spill or leak. The staining did not extend to any storm drain inlets (**see CWA Photo #20**).

On the north side of building 362, the inspector observed at least one oil-water separator (**see CWA Photo #21**), one of the Facility's structural controls on storm water pollutants. The inspector requested that Mr. London open the manhole covers to the oil-water separator located immediately north the building, in order to observe the interior.

The inspector observed that the water level inside the oil-water separator was high. There was no debris or visible oil floating on the surface (**see CWA Photo #22**). According to Mr.

London, the oil water separator has three chambers, separated by baffles. Mr. London stated that he thought one of the chambers contained a sand filter. The inspector asked that a second manhole be opened, in order to view more of the interior. According the SWPPP site map, inset map # 3, there is only one oil/water separator on the north side of building 362. However, Mr. London was uncertain if the second manhole led to a second oil/water separator, or if the first oil/water separator had more than one manhole. When the second manhole was opened, the inspector observed what appeared to be an oil slick on the surface (see **CWA Photo #23**).

The inspector then asked to view the interior of the second oil-water separator. When the hatch to the second oil-water separator was opened, the inspector observed some brown oily substance floating on the water, and a pipe that pointed towards a sanitary sewer manhole approximately 6 to 10 feet to the north (see **CWA Photo #24**). The inspector next asked Mr. London to open the sanitary sewer manhole to see if the other end of this pipe was visible. Mr. London complied and the inspector observed a partially corroded pipe end, protruding approximately 6 to 8 inches into the manhole (see **CWA Photo #25**). The inspector did not perform a dye trace or any other method to confirm this pipe was the same pipe observed in the oil-water separator, but notes that it is a possible connection to the sanitary sewer instead of the storm drain system.

The inspector asked Mr. London how often the Facility cleans out its oil water separators. Mr. London replied that oil water separators are cleaned out every five years, or whenever they require additional maintenance. The inspector then asked Mr. London how the Facility knows when the oil-water separators require additional maintenance, but Mr. London did not know the answer to this question. The inspector inquired if there was a regular inspection and maintenance schedule beyond the 5-year cleanouts, and Mr. London replied the answer was no. **CWA attachment #5** shows a performance work statement for maintenance of oil/water separators and grease traps at the Facility, dated May, 2014, but it lists no oil/water separator on the north side of building 362.

Outfall PX

At outfall PX the inspector observed the mouth of a 4 to 5 foot diameter concrete pipe, but was unable to look inside the pipe due to the high water level and lack of footing at the waterline from which to observe the interior (see **CWA Photo #26**). There was no visible discharge from the outfall due to dry conditions.

Outfall QX

At outfall QX the inspector observed the 4 to 5 foot concrete pipe widening in a fan shape at its mouth, which showed little or no signs recent storm water flow. The inspector did note signs of tidal influence including drift wood and a green biological scum on the interior of the pipe, but did not detect any odors, nor visual indicators of storm water pollution such as staining or sheen (see **CWA Photo #27**).

Outfall SX

At outfall SX the inspector observed the 4 to 5 foot concrete pipe widening in a fan shape at its mouth. There was some water in the pipe, with a green biological scum on the surface, but the inspector was not able to determine if this was due to storm water flow or tidal influence. The inspector noted no odors nor any other visual indicators of storm water pollution such as staining or sheen (see **CWA Photo #28**).

Outfall 016

Outfall 016 is located on the Anacostia side (north side) of the Facility, and due to topography, storm water in this area of the Facility drains to sumps, and electric pumps lift the storm water over the levees and into the river. The inspector observed a concrete box with metal grate just above the water line, but due to the steepness of the levee at this point, did not attempt to view the interior of the outfall (see **CWA Photo #29**). The inspector also observed the sump where storm water from the Anacostia side collects before being pumped over the levee. The inspector observed water inside the sump, but did not see any visual indicators of storm water pollution (floating debris, staining, discoloration, turbidity, or sheen) (see **CWA Photos #30 and #31**).

Outfall 017

Outfall 017 is located on the Anacostia side (north side) of the Facility. The mouth of the outfall is a concrete box culvert that widens into a fan shaped apron at the river (see **CWA Photo #32**). The inspector was unable to view the interior of the box culvert because a chain link security fence blocks access to the concrete apron on both sides of the culvert. The inspector did note that concrete blocks, approximately 3 feet long by 1 foot wide by 1 foot high, were present on the apron, ostensibly for velocity control (per Part 2.1.2.5 of the MSGP). The inspector noted the apron was dry and showed no recent signs of storm water flow. The inspector did not note any odors or visual indicators of storm water pollution (staining or sheen). The inspector also entered the pump house (building 379) that contains three (3) electric pumps for discharging storm water over the levee. The interior floor of the pump house was clean. The pumps were not leaking oil or lubricants and appeared to be in good condition (see **CWA Photo #33**). Approximately ten (10) feet behind the pumps was the sump where storm water collects by gravity drainage before being pumped over the levee. The inspector observed there was a minimal amount of water (< 1 inch) in the sump and some muddy sediment was visible along the sides and bottom (see **CWA Photo #34**).

Outfall 010

Outfall 010 is located on the Anacostia side (north side) of the Facility and is the outfall that discharges storm water flow from the drainage basin in which the HMX (Marine One helicopter) heliport is located. The inspector observed a concrete box culvert, widening into a fan-shaped apron, approximately 40 feet wide at the water line. Concrete blocks, similar to those observed at outfall 017, were present on the apron, as well as rip-rap, in accordance with the velocity control requirement in Part 2.1.2.5 (see **CWA Photo #35**). The inspector was not able to

view the interior of the culvert due to chain link security fence restricting access on both sides. The inspector noted the apron was dry and showed no recent signs of storm water flow. The inspector did not note any odors or visual indicators of storm water pollution (staining or sheen).

Demolition of Seabees building

While walking along the levee, the inspector observed that workers were actively demolishing an old building situated between Robbins Road and the HMX facility. Ms. Mertz identified this structure as the old Seabees building and stated that metal coated with lead-based paint was being removed by the contractor and shipped to a metal recycler. The inspector did not photograph the demolition site due to the Facility's stated security concerns about photographs in the vicinity of the HMX heliport. However, due to the potential for storm water pollutants generated by demolition activity, and the fact that some debris was potentially hazardous (lead-based paint), the inspector requested to view the storm water drainage infrastructure in the vicinity of the demolition site. The inspector observed one storm drain inlet in the road, immediately east of and adjacent to the demolition site. A tractor-trailer truck that was being loaded with demolition debris was parked on top of the inlet, partially obscuring the inspector's view (**see CWA Photo #36**). The inspector observed what appeared to be a filter cloth around the sides of the storm drain inlet. Straw, woody debris, and some garbage were present on the grate, but there was not any significant accumulation of sediment around the inlet.

D.C. Army National Guard vehicle maintenance facility (building 353)

The inspector observed the storm water drainage infrastructure in the Washington D.C. Army National Guard maintenance facility and adjacent motor pool lot to the east. The adjacent lot, as measured in Google Earth Pro, has an area of approximately 200,000 square feet. The inspector walked through portion of the lot to observe the condition of storm water inlets, look for potential storm water pollutant sources, and general housekeeping.

On the east side of building 353, a strip floor drain runs the length of the building in front of the indoor maintenance bays (**see CWA Photo 36**). The inspector noted spill kits were present in building 353. The inspector spoke with a D.C. Guardsman by the name of Sergeant Ford, and inquired about the maintenance of military vehicles and the storage of vehicle batteries and hazardous materials. SGT Ford responded that maintenance work occurs indoors batteries and other hazardous materials are kept inside metal storage lockers, not exposed to rain water (in accordance with sections 2.1.2.1. and Sector P technology-based effluent limit requirements of the MSGP).

In the motor pool lot, the inspector observed that all military vehicles parked there had drip pans positioned below the engines, in accordance with section 8.P.3.1.1 of the MSGP (**see CWA Photo #37**). The inspector also understands the use of drip pans to be a standard best management practice when parking wheeled military vehicles in the Army.

The inspector observed one storm drain inlet, shown on the SWPPP map, located in the east central portion of the lot. The inspector observed that there was an accumulation of sandy sediment on the pavement, and deposited around the inlet. The sediment accumulation was

significant enough to show ripple marks and/or capture the imprints of tire and boot treads (see **CWA Photo #38**). The inspector notes that Section 2.1.2.2 of the MSGP requires the Facility to follow good housekeeping practices such as “sweeping at regular intervals.”

Defense Intelligence Agency (DIA)

The inspector visited the DIA (building 6000) to observe the storm water infrastructure and speak with DIA facility representatives about a possible connection between the storm water drainage infrastructure, and ground water pumping wells. The inspector met with DIA representatives Ms. Renee Robinson, Mr. John Chrittendan, and Mr. Dave Sheets. Outside the main entrance to the DIA facility, located on both the west and east sides of the breezeway, the inspector observed a pond. Measurement of the pond in Google Earth Pro estimates the ponds area at roughly 10,000 square feet on the west side of the breezeway, and 4,000 square feet on the east side of the breezeway. The pond’s depth was unknown. The pond on the west side of the breezeway had significant wetland vegetation (e.g. cattails) and a fountain (see **CWA Photo #39**). Mr. Chrittendan explained that the DIA pond serves multiple purposes: storm water drainage, a constructed wetland for natural filtration of storm water, and as a kind of security “moat.” The pond is actually two separate, lined basins, connected underneath the breezeway entrance to the DIA building by a pipe. Mr. Chrittendan did not specify the diameter of this connecting pipe. According to Mr. Chrittendan, the inflows to the pond are the following:

- Direct precipitation
- An 18 inch diameter pipe conveying storm water from the roof of the DIA building
- A 30 inch diameter pipe conveying storm water from the DIA parking lot
- A 12 inch diameter pipe conveying storm water from the roof of the DIA building
- A pipe of unknown diameter conveying storm water from the roof of the DIA building

Each of the inflow pipes listed above has a check valve.

● Additionally, Mr. Chrittendan stated that inflow into the pond is supplemented with potable drinking water from D.C. Water and Sewer Authority (DC Water), in order to keep the aquatic plants alive during dry weather periods. Mr. Chrittendan stated that the potable water line used to fill the pond is equipped with a meter, check valve, and backflow preventer. The inspector notes that, according to EPA records, while the potable water itself is supplied by DC Water, it flows to DIA through a public water system owned and/or operated by the Facility and by the Washington Suburban Sanitation Commission. This public water system is known as “JBAB-Bolling” (PWS ID# 0000007).

- A 4 inch diameter purge line from DIA’s two (2) ground water wells (see discussion of DIA wells below).

According to Mr. Chrittendan, outflow pathways from the DIA pond include the following:

- Evaporation or uptake by aquatic plants
- Overflow at a weir to a 30 inch diameter pipe, which drains to outfall WX

The inspector notes that the SWPPP site map shows a symbol for a catch basin or drop inlet located *in the pond*, on the west side of the DIA breezeway.

DIA wells and interface with public water system

Ground water from two approximately 450-foot deep wells is pumped at a rate of at least 50 to 60 gallons per minute to provide water for the cooling towers on the roof of the DIA building. According to Mr. Chrittendan, the wells could be pumped at a rate of 150 gallons per minute with minimal drawdown. Before operation, the wells would need to be purged of sediment, and purge water would be discharged to the pond. Before being pumped up to the cooling towers, DIA also treats the ground water by adding a corrosion inhibitor, a biocide, and passing it through a water softener. According to Mr. Chrittendan, blowdown water from the cooling towers is discharged to the sanitary sewer system. Mr. Chrittendan stated that the last time the DIA wells were pumped and tested was 2009 and that, at that time, the water met the National Primary Drinking Water Standards (NPDWS) established under the federal Safe Drinking Water Act (SDWA). Mr. Chrittendan went on to explain that, originally, the two DIA wells had an interconnection with “JBAB-Bolling”, the Facility’s public water system. However, a SDWA enforcement order by the EPA halted use of water from the wells. EPA’s position was that the interconnection of the wells with the JBAB-Bolling public water system posed a risk of contamination to consumers. DIA has since disconnected the wells from the Facility’s public water system. The inspector notes that Part 1.1.4.1 of the 2008 MSGP states that storm water discharges that are mixed with non-storm water, other than those non-storm water discharges listed in Part 1.1.3, are not eligible for coverage under the MSGP. According to Part 1.1.3, “Potable water, including line flushings” and “uncontaminated ground water or spring water” are acceptable non-storm water discharges. Although Mr. Chrittendan stated that the wells are 450 deep, and that 2009 testing showed the water met NPDWS, the inspector did not inquire about which aquifer the wells draw from, or if the ground water is known to be contaminated. The inspector observed that to determine compliance with the MSGP in the event of discharging well purge water to the DIA pond further investigation into the ground water source might be needed. The inspector notes that the DIA pond is a constructed wetland which may act as a natural filter for many contaminants.

The inspector moved westward, along a grassy swale that runs along the south side of the DIA building (see CWA Photo #40), attempting to find a trace of an outflow pipe for the pond. Roughly 550 feet west, the inspector observed a storm drain inlet in the swale (see CWA Photo #41). Inside the inlet, the inspector observed a PVC pipe, approximately 1 foot in diameter, on the west side of the inlet. Water was present in the inlet (see CWA Photo #42). The inspector also observed a smaller diameter black plastic pipe entering the inlet box from the east (the direction of the DIA pond). The inspector looked for the other end of this pipe around the perimeter of the pond, but could not locate it. Ms. Robinson stated that the other end of the black plastic pipe might be buried under the gravel bed that surrounds the pond. The inspector could not get a good enough view of the PVC pipe to observe its gradient or make a conclusive determination if it was an inflow or an outflow pipe, but given that it was one of only two pipes observed connecting to the inlet box, and the overall topography of the Facility slopes down to the rivers, the inspector thinks it possible this is an outflow pipe which connects to the 30 inch outflow pipe mentioned by Mr. Chrittendan.

AAFES Parking Lot

The inspector visited the Army – Air Force Exchange Service parking lot to observe the oil-water separator connected to the storm water drainage system. The inspector asked that a manhole be opened in order to view the interior. The inspector observed no oil nor sheen on the

surface of the water, and noted nothing extraordinary (see **CWA Photo #43**). The inspector observed a dumpster at one end of the AAFES parking lot, and dark staining of the pavement in a path leading to a storm drain inlet (see **CWA Photo #44**). The stains were reddish and appeared to be iron oxide. The inspector notes that Part 2.1.2.1 of the MSGP requires minimization of exposure to storm water of “material storage areas”, including “disposal”, by placing them indoors or providing storm resistant cover. This requirement may apply to dumpsters. The inspector notes that “uncovered trash dumpsters” is listed as a potential pollutant source in the Facility’s SWPPP.

Heating Plant

The inspector visited the Facility’s heating plant and walked around the outside to observe the storm water drainage infrastructure. The inspector observed that downspouts conveying storm water from the roof the heating plant were connected to PVC pipes below ground (see **CWA Photo #45**).

Salt Storage

The Facility’s road salt storage is under cover in a circular dome, building 415, and thus generally not exposed to storm water (see **CWA Photo #46**). However, the inspector did note salt on the pavement surface in front of the building, and traced the salt on the ground, approximately 100 to 150 feet to a storm drain inlet to the south. See **CWA Photos #47 through #49**. The inspector observed an accumulation of a white crystalline substance, which appeared to be salt, inside the storm drain (see **CWA Photo #49**). The inspector notes that Part 2.1.2.7 of the MSGP states “You must implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile.” Additionally, the inspector notes that Section 3.7 of the Facility’s SWPPP states that “personnel sweep salt that spills outside the salt dome, located at Building 415, during conveyance to and from the covered salt dome back under the cover of the dome to prevent exposure to stormwater runoff.”

Recycling Center

The inspector walked through the recycling center to observe the condition of storm water drainage infrastructure and the exposure of recycled materials to storm water. The inspector observed that scrap metal was stored in an uncovered but self-contained dumpster. The inspector observed that printer toner cartridges were in open cardboard boxes on pallets, staged outdoors (see **CWA Photo #50**). The inspector notes that the additional requirements for Sector N (8.N.3.3.2) require minimization of exposure of recyclables to precipitation and runoff, including providing “covers over containment bins, dumpsters, and roll-off boxes” staged outdoors.

Outfall WAX

At outfall WAX, the inspector observed an approximately 2 to 3 foot diameter concrete pipe that widens slightly into a U-shaped concrete apron at the water line (see **CWA Photo #51**).

A metal gate over the end of the pipe appeared to be slightly ajar. The inspector did not observe any odors or visual indicators of storm water pollution (staining or sheen).

Outfall WX

The inspector searched for outfall WX but could not locate it. Ms. Mertz stated that it might be behind the perimeter fence for DC Water's Blue Plains Tunnel project.

Storm Water Pollution Prevention Plan (SWPPP)

The inspector requested and received a copy of the Facility's SWPPP in order to review it for compliance with the requirements of section 5 of the 2008 MSGP. The copy of the Facility's SWPPP that was submitted to the inspector was dated May, 2012. It was written by a contractor, AH/BC Navy Joint Venture, of Newport News, Virginia. During the SWPPP review, the inspector noted the following:

- Per section 5.1 of the 2008 MSGP, the SWPPP contained a description of the Facility, and associated industrial activities. However, the SWPPP notes in section 1.4.2 that several "industrial-like activities carried out at JBAB do not fall under the MSGP." These activities which the SWPPP says do not require coverage under the MSGP are:

1. D.C. National Guard vehicle maintenance
2. Marina
3. HMX Heliport
4. Recycling center
5. Heating plant

With regards to the applicability of the MSGP to storm water discharges from the DC Army National Guard maintenance facility, the inspector notes the requirements of Sector P (Land Transportation and Warehousing) apply to industrial activity that meets the SIC Codes listed in Appendix, Table D-1. These SIC codes include local and highway passenger transportation, motor freight transportation, railroad, U.S. Postal Service, and bulk petroleum stations and terminals. It is unclear to the inspector if the terms "passenger transportation" and "motor freight transportation" are intended to apply to the military vehicles observed at building 353 and adjacent lot. The inspector observed Humvees and M1078 LMTVs (military light utility trucks).

With regards to the marina, the inspector notes that Table D-1, Appendix D lists SIC codes 4412-4499 as industrial activity requiring coverage under the MSGP. 4493 is the code for marinas. Additionally, 40 CFR §122.26(b)(14)(viii) lists SIC codes beginning with 44 as included in the definition of "stormwater discharges associated with industrial activity."

With regards to the HMX Heliport, the inspector notes that, Table D-1, Appendix D lists SIC codes 4512-4581 as industrial activity requiring coverage under the MSGP. SIC code 4581 includes hangar operation and aircraft storage at airports, while 4522 includes "helicopter carriers."

With regards to the recycling center, the inspector notes that Part 8.N.3.3 establishes that recycling facilities that accept source-separated recyclables from primarily non-industrial and

residential sources fall under Sector N and are required to get permit coverage for storm water discharges.

With regards to the Facility's heating plant, the inspector is uncertain if a high temperature hot water boiler plant falls under the definition of steam electric power generating facilities (Sector O), or falls under the general Sector AD (permit required by the Director).

- Per Part 5.1.1, the Storm Water Pollution Prevention Team must be identified by name in the SWPPP. Ms. Mertz, the Facility's lead on storm water issues, was not identified in the SWPPP. The SWPPP appeared to need updating with regards to personnel.

- The SWPPP contains a full accounting of above ground storage tanks and fueling points, in accordance with the requirement to document potential spills and leaks in Part 5.1.3.3.

- The SWPPP calls for monitoring (sampling) of outfalls, quarterly visual monitoring of storm water, quarterly routine inspections, and annual comprehensive site evaluations, per Part 5.1.5.2 and Part 6 of the MSGP.

- The SWPPP met the signature requirements per Part 5.1.7 of the MSGP.

- Per Part 5.1.2 of the MSGP, the Facility's SWPPP site map must show the location of a number of items. The inspector observed that the SWPPP site map shows drainage basins, outfalls, storm water pipelines, inlets and catch basins, manholes, and oil/water separators.

The SWPPP site map attachments show eleven (11) locations where potential pollutant sources are identified, including (but not limited to): salt storage, fueling stations, drums, dumpsters, petroleum, oil, and lubricant storage tanks, and vehicle storage.

The site map does not specify which outfalls are considered to be "substantially identical" for the purposes of the MSGP requirements.

Routine Inspections and Quarterly Visual Monitoring

Part 4 of the MSGP requires the Facility to conduct routine inspections of storm water control measures and of areas where industrial activity is exposed to storm water, as well as make visual assessments of storm water discharge, at least quarterly. Procedures for routine inspections are described in Section 5 of the Facility's SWPPP. The inspector requested copies of the Facility's quarterly visual monitoring reports, and received copies of the quarterly visual monitoring reports from 2012 through 2015 (**see CWA attachment #3**). The inspector reviewed in detail the quarterly visual monitoring reports for 2014. The Facility noted suspended sediment observed in water at nine (9) outfalls on 21 October, 2014, but in several cases these observations occurred in wet wells, since no discharge was happening at the outfall itself due to differences in elevation (i.e. outfalls where storm water drainage must be pumped over the levee). Additionally, the Facility notes that opaque, light brown color to the water discharging from outfall 018 on 20 March, 2015, but does not note the presence of suspended sediment.

The inspector also requested and received a copy of monthly inspection reports, from each quarter of 2014, representative of the Facilities inspection program under Section 5 of the SWPPP. The inspection reports are location specific (for example, one inspection report was completed for the recycling center), and consist of yes or no checklists. Examples of reports reviewed by the inspector are included in **CWA Attachment #7**. The inspector notes that the inspector listed on each inspection report form is different based on the location that was inspected. For example, the inspection report done at the Recycling Center on 28 May, 2014 lists Birjette Stevenson as the

inspector. However, Birjette Stevenson is not listed in the SWPPP as a member of the Storm Water Pollution Prevention Team. The inspector notes that, per Part 4.1.1 of the MSGP, a member of the Storm Water Pollution Prevention Team must be present at all inspections.

Monitoring

Part 6 of the MSGP (and accordingly, Section 4 of the SWPPP) requires the Facility to monitor storm water discharges because the receiving waters (Potomac and Anacostia Rivers) are Impaired Waters having Total Maximum Daily Loads, for the following parameters: BOD, oil & grease, nutrients, TSS, organics, copper, and zinc.

The inspector reviewed the 2014 monitoring reports for completeness and accuracy. The reports indicate that a total of ten (10) outfalls are identified in the SWPPP (4 on the Anacostia side, 6 on the Bolling side), and that seven (7) outfalls were sampled when a qualifying rain event occurred, and no rain occurred within the previous 72 hours (per Part 6.1.3 of the MSGP). The inspector notes, however, that the site map in the SWPPP shows 34 outfalls, and the text of the SWPPP makes no specific mention of which of these are the 10 outfalls noted in the monitoring reports. The following outfalls were sampled by the Facility's contractor, CH2MHILL: 010, 016, 017, 018, QX, PX, and EX. No samples were taken during the first quarter (1 April to 30 June) and second quarter (1 July to 30 September); the monitoring reports state that no samples were taken because there were no qualifying rain events during this period. The inspector cross checked this statement with NOAA rainfall records from the precipitation gauge at Reagan National airport (see **CWA attachment #4**). The monitoring reports indicate the Facility did sample in the 3rd and 4th quarters, on 21 October, 2014 and 20 March, 2015, respectively. See **CWA attachment #6** for monitoring (sampling) results from 2014.

Comprehensive Site Evaluations

The inspector requested and received copies of the Facility's 2014 annual comprehensive site evaluation reports to EPA, and reviewed them for consistency with the Facility's quarterly monitoring reports and quarterly visual assessment reports. Based on the review, the inspector notes the following:

- The comprehensive site evaluation report for the Anacostia side of the Facility (permit tracking number DCR05A757) was signed and dated 9 March, 2015. It appears to have been completed before the end of the fourth quarter (1 January to 31 March). Thus, the report missed the 20 March, 2015 quarterly visual assessment that noted opaque, light brown water discharging from outfall 018. Instead the comprehensive site evaluation report leaves blank section B, box 5, which calls for a description of evidence of pollutants entering the drainage system or discharging to surface waters.
- Consistent with the SWPPP, the comprehensive site evaluation report for the Bolling side of the Facility (permit tracking number DCR05A816) does not identify the marina as an area where industrial storm water pollutants may be generated.
- The comprehensive site evaluation report for the Bolling side of the Facility states that no samples were taken during the 3rd quarter (1 October to 31 December), but monitoring data shows samples were taken from outfalls QX, PX, and EX during a rain event on 21 October, 2014.

See CWA attachments 8a and 8b for the 2014 Annual Comprehensive Site Evaluation reports.

Spill Prevention Countermeasure and Control

Garth Connor was the EPA inspector performing this segment of the multi-media inspection. This Facility is a large complex federal facility with over fifty different agencies operating as tenants on a 966-acre property. The Navy Support Facility staff work in the Public Works Division and are in charge of the environmental compliance for the entire base. This group tries to manage all of their federal tenants in a manner that keeps them in compliance with the applicable environmental regulations.

The Facility did have a Spill Prevention Control & Countermeasure (SPCC) plan, prepared by CH2M Hill, and it was officially certified by Jamiyo Mack, P.E. on August 16th, 2013. In May 2014, Commander Clyde Mayo signed the management approval certification for the plan. The plan states that the Facility currently has approximately 518,393 gallons of oil-storage capacity in about 115 different tanks. David May, of the Public Works Division of the JBAB staff, stated that a number of tanks had been removed or taken out of service since the plan was written in 2013, and that an update to the plan was going to be done in the Fall of 2015. For example, four underground storage tanks (USTs) had been removed in October, 2014, and were crossed out in the version of the SPCC plan provided to the inspector. Those four USTs were replaced with aboveground storage tanks of various sizes. Those are the types of changes which will be included in the next version of the plan which is intended to be developed in late 2015. The SPCC regulations state that a plan is to be amended within six months of any significant changes at a facility.

Inspection Observations

As part of the field inspection, the inspector went to the Facility's boat marina, called the Capital Cove Marina, with Facility representative, Mr. David May and Justin Young, EPA's UST inspector. **SPCC Photo #1** is a view of the Potomac River from the location of the underground storage tank that supplies the fuel at the marina. **SPCC Photo #2** is a view of some of the boats docked at the Capital Cove Marina on the day of the inspection. It is normally a busy marina and there are many boats docked or moving about at this location. Mr. May explained that this marina was utilized by a wide variety of boats from different agencies, including the U.S. Coast Guard. He also told the EPA inspectors that the marina dispenses about 1,000,000 gallons of fuel per year. **SPCC Photo #3** is the fuel dispenser which is equipped with an extra-long hose, in case a boat needs to be fueled and is docked at a long distance from the dispenser. **SPCC Photo #4** shows the white container next to the dispenser which holds the extra length of the hose. **SPCC Photo #5** shows a typical storm water outfall nearby the marina. Mr. May informed the inspector that all of the Facility's storm water outfalls are covered with a black mesh fabric filter.

From the description and operation of the Facility's marina, large quantities of oil (gasoline) are transferred over water, but the Facility staff didn't think that a Facility Response Plan (FRP) was required. Facility staff also informed the EPA inspector that there had been a recent spill of gasoline at the marina. Mr. May later showed EPA how they had filled out the C-1

chart to determine if an FRP was needed (**SPCC attachment #1 – Substantial Harm Flow Chart**). This chart was filled out and as a result, the Facility staff came to the conclusion that an FRP was not required. The Facility had an oil capacity onsite of over 500,000 gallons. According to the Substantial Harm Flow Chart, the Facility selected the following as Facility's conditions: The Facility has an onsite capacity over 500,000 gallons and also transfers over water greater than or equal to 42,000 gallons. The inspector informed Mr. May and his supervisor, Madina Alharazim, that based on the information provided, the need for an FRP needed to be reevaluated by the Facility. Mr. May was doing the annual SPCC training for staff each year, and the SPCC tank inspection program appeared to be adequate.

Closeout Conference

The EPA inspectors relayed their concerns to the Facility during a closeout conference on September 3, 2015, via a PowerPoint slideshow and stated that any outstanding or additional information, which the inspectors were unable to obtain during the inspection, could be sent to the team lead inspector. The Facility subsequently sent multiple documents, which have been incorporated into this report.